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Pathways to Personality

A Pageant Portraying the Ultimate Aim of Physical Education



1. PROLOGUE



2. SPIRIT OF PHYSICAL EDUCATION



3. SPIRIT OF HEALTH

(The illustrations are continued on the rear inside cover)

The Research Quarterly

of the American Physical Education Association

George Williams College Physical Education Institute
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"PHYSICAL - EDUCATION - AND - PERSONALITY - DEVELOPMENT"



ACULTURED MIND - DIRECTING A VIGOROUS BODY - POWERED WITH DISCIPLINED EMOTIONS - CREATOR OF BRAVE NEW WORDS

FOREWORD

GEORGE WILLIAMS COLLEGE of Chicago has since its beginning in 1890 directed its efforts toward the preparation of professional leadership in the area which today is known as personality development. It early recognized the potential contributions of physical education to this cause and has consistently sought to sensitize its students to these opportunities. The calling of Martin I. Foss to the Professorship in Physical Education in 1916 overtly emphasized this position. It is therefore most appropriate that his retirement after thirty-five years of active service to physical education should be marked by this college with an Institute devoted to the theme: Physical Education and Personality Development. The wide interest and genuine cooperation extended to this undertaking by so large a group of thoughtful leaders in physical education must be interpreted as not only a fine tribute to Mr. Foss but also as a recognition on the part of these leaders of the value of such an Institute to our profession.

In order to conserve these values for the larger number of present and future leaders who could not attend, these proceedings are published. George Williams College expresses its sincere appreciation of those who contributed their time and thought to the success of the Institute program and welcomes the counsel of any who may offer constructive suggestions for the improvement of future efforts of this type.

Some Characteristics of Effective Physical Education for Personality Development

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ELEMENTS WHICH GO INTO ANY EDUCATIONAL SITUATION

IN ANY discussion of the characteristics of an effective tool for personality development, it is necessary to consider the elements which make up an educational situation. The eternal triangle is not limited to the imagination of the novelist but is an ever present problem of the educator. The eternal triangle of the educator however is not made up of two legitimate parts and one illegitimate part. Each part is not only legitimate but is *essential* for effective learning.

First comes the educatee with his inherited tendencies to sense, feel, and act, expressed in individually different ways in all aspects of behavior: his susceptibilities, interests, satisfactions; and his physiological and morphological characteristics. Taken into the laboratory he may be seen as a mosaic of intricately interreaching parts. Seen by us he is a whole, made up, it is true, of the same elemental colors as are others; but each picture is distinctive. This picture we call his personality. Some creations have balance and harmony; others have strength but may lack beauty; some we like because they agree with our own notions of what is beauty; others we do not like, belonging as they do to another school of beauty.

The next element in this educational triangle is the situation—more commonly called the activities, the things which the individual does as he manipulates himself in relation to his environment. These activities or situations have been grouped, and one of the groupings is physical education. They are the tools which you and I use to bring about desired ends. These activities vary in their appeal to child or adult, this appeal being manifested by the *interest* in the *doing* and the *satisfaction* in the *accomplishment*, which accrue to the educatee. Activities vary in the demands which they make, in the individual expression and in the social interrelationships which they provoke. The inherent or demanded changes which accrue to the individual as he performs these activities vary with the nature of the activities as do the opportunities which are provided for the leader to exert his leadership.

Finally appears the villain of the play, *leadership* in this case—not a

villain because of illegitimate interference, although this has all too often occurred, but a villain because leadership has sometimes been purely selfish and not entirely in the best interests of persons. The leader manipulates the educatee, the activity, and himself for the ends desired. He functions efficiently as he understands and can use: (1) the nature of the educatee, (2) the nature of the activity, (3) the nature of himself, and (4) as he can understand the implications of the ends desired and progressively move toward them. He gains his ends, having set the stage, through:

1. Direct leadership as the activity goes on;
2. The creation of atmosphere surrounding the activity;
3. The process of indoctrination; and
4. Through the process of discussion concerning the issues which have arisen in past activities.

The three then—educatee, activity, and leadership—are the elements making up an educational situation. We are here concerned with the activities; but activities cannot be discussed without consideration of the other two, the educatee and leadership. The question before us is: "What are the characteristics of activities which are conducive to personality development?"

CHARACTERISTICS OF AN ACTIVITY FOR PERSONALITY DEVELOPMENT

Obviously every activity in which the child or adult participates affects the personality; some activities however are more conducive to *rule learning* and some are better opportunities for *personality development*. It is at that point that we need to reconsider physical education as an outstanding tool for the informal and formal education of the child and adult.

Emphases in personality development are switched from skill learning, body development, or mind learning to *learning how to live in such a manner that there accrues to the educatee a wholesome integrated healthful personality, individually and socially attuned to the world of which he is a part*.

Skills and the knowledge of rules are necessary for the understanding of the world of which we are a part, socially, economically, and idealistically; but without an opportunity to live them out and to develop a personality in which and with which to live, such attainments become a mere accumulation of knowledge.

The modern emphases of education demand that attention be given to living rather than to rule learning; to leadership skilled as social engineers rather than to leadership skilled in subject matter. The leader must utilize the skills to hold the interest of the educatee so that he may exert further leadership. He must utilize the total activity situation for the development of a wholesome personality.

Physical education must be evaluated as it provides "opportunities for the educatee to act in those situations which will allow for full expression and development, provide adequate opportunities for direction and ensure a wholesome integrated healthful personality."

The criteria to be submitted for the consideration of physical education as a tool for personality development will be treated under two headings:

1. The opportunities for full development resident in the nature of the activity, and
2. The opportunities for the direction of individuals through these activities for the ends desired.

In other words what changes are inherent in the activities and accrue to the individual irrespective of leadership and what opportunities are there for the leaders to shape a personality through these activities?

THE INHERENT CHANGES ACCRUING TO AN INDIVIDUAL

In the discussion of the personality changes which accrue to the participant in an activity three factors need to be considered. First, what aspects of our total organism are exercised and to what degree are these exercised in the activity? Secondly, one of the most persistent and important emphases of the mental hygienist—what degree of *personality integration* is demanded by the activity; and thirdly, what opportunities are there for the participant to develop *self-responsibility* for his responses? This will here be called *self-direction*.

A. THE DEGREE OF DEVELOPMENT WHICH ACCRUES

This criterion implies the changes which accrue to the human organism, "whether we like it or not." By the very nature of the activity, certain changes will accrue, irrespective of this leadership. It is true that leadership will affect this and should affect this by prescribing dosage and rhythm of rest and activity. These are external conditions which do not, however, change the developments which go on when the individual actually participates in the activity. I am using as the division of these developments the four phases of C. W. Hetherington,¹ namely neuromuscular or menti-motor, organic, interpretive, and impulsive. The question which must be asked by the evaluator is this: If Johnny engages in a game of basketball, or in practice in arithmetic, what changes are actually taking place in terms of these four divisions?

1. *Neuromuscular*.—The neuromuscular or menti-motor developments are the changes which occur in the neurological connections concerned with the activity. In the vernacular of the profession, it is the

¹ Clark W. Hetherington, *School Program in Physical Education*, pp. 47-48. Yonkers-on-Hudson: World Book Co., 1922.

increased skill which takes place. If I am exercising certain connections then two results can accrue: I either strengthen these neurological connections, or I bring about changes in the connections so that more or less efficient skill adaptation results. The question here is not what the skill can be used for, except that it should be kept in mind that we have constantly assumed that skills were only valuable as they led to efficient adult adaptation. The skill of vaulting over an obstacle may be valuable inasmuch as it leads to further experimentation with vaulting and provides therefore further educational opportunity, irrespective of whether it is valuable for the adult in manipulating his leg.

2. *Organic*.—The organic development, best expressed by the nutritive and regulatory systems, is the second point. What changes take place in the various activities that lead to the increase of organic balance, it being presumed that organic balance is necessary for efficient function, whilst the amount of organic power necessary to perform a given task may vary between individuals and within the same individual? It is certain, however, that there must be organic balance in order to have functional efficiency.

3. *Interpretive*.—The interpretive or intellectual changes or developments which accrue involve the increasing ability to interpret clearly the situations in which the individual engages. They involve interpretations of inanimate and animate phenomena. The question which arises here in the evaluation is: To what degree do the activities, *by their very nature*, demand that there be an increasing interpretation of the inanimate, and, most important of all for personality education, the animate world in which the individual lives?

Interpretation of imaginary situations can be made as can interpretations of actual situations. The word of mouth or other symbols are used to set up certain situations which are not present in the immediate environment and an individual may interpret the ways in which he would react to these if the situation were actually present. It is assumed in modern education, however, that the interpretation of the *actual phenomenon itself* is superior as an educational medium rather than the interpretation of what I would do if I were in a situation in which I am not, and which in many cases I have never experienced.

4. *Impulsive*.—It is assumed that emotional responses are developed, by which is meant conditioned, providing they are allowed to be expressed in a conditional atmosphere. What opportunities do the activities provide for these emotional experiences?

It is realized fully that there are many listings of emotions. It becomes less the question of tabulating the number or the types, and more the question of an understanding of what is an emotional experience as we have experienced it and have observed others experience it. The use of these emotions in the activities is as an opportunity for their adaptation.

B. INTEGRATION

The constant stress of modern education is that we shall develop, through the procedures of organized and unorganized education, an individual who is integrated, who has a degree of wholeness, in whom all aspects of personality are so interrelated and balanced that they insure that no minor factor will disturb the organic whole.

"Mental hygiene especially emphasizes the fact that the normal human personality in child and adult is a unit, an integrated personality; not only is the individual's mind an integrated whole, but the whole organism is integrated. It reacts as a whole, mind and body together, to the various situations of life."²

From the point of view of evaluation, the question arises, to what degree do the activities tend to integrate the phases of personality into one functional whole? The term referred to by Burnham, "attentive co-ordinated activities" best expresses this thought. Dewey's statement that an individual may be present physically and absent mentally expresses the negative aspect of the concept. It is the degree to which the individual is, by the very nature of the activity, compelled to give *undivided attention* to that which is going on.

Integration may be thought of both from an individual point of view and from that of society. An integrated activity from an individual point of view as suggested above is one which demands *undivided attention*. An integrated activity from the social point of view is one in which "the different abilities of different members of the group are integrated into one whole for the common welfare."

It would appear possible to evaluate the activities according to the degree to which they demand this undivided attention; in the vernacular, the activities in which I must give "all that I have" are those which would rate high in this scale. The degree to which an activity by its nature demands that every member of the group work for the common welfare can also be included in such an evaluation. It should be kept in mind that such an evaluation is in terms of the activity itself and not the ultimate or assumed end. If golf demands more undivided attention than does my business, then golf ranks higher in this rating than do my business activities. If basketball by its nature demands greater cooperative action for a common welfare than is demanded in an arithmetic class then basketball provides greater opportunity for social integration.

C. SELF-DIRECTION

It becomes apparent in personality development that one of the essentials is that of providing the individual with an ability in self-direction—the ability to make decisions and to act upon them, possibly in opposition to the dictates of the group. By self-direction is meant the degree to

² William H. Burnham, "A Mental Hygienist's View of Character," *Interpretations of Physical Education*, Vol. III. New York: A. S. Barnes & Co., 1932.

which the individual takes responsibility for the choices which he makes. Activities may be evaluated to the degree to which they demand, by their very nature, that the individual take the responsibility for the choices which he makes.

I have attempted to indicate that activities vary in their nature; that some are more fruitful for personality development than others, because by their nature they demand certain types of responses, integrated and self-directional, and bring about varying degrees of neuromuscular, organic, interpretive, and impulsive changes. Beyond these *inherent* changes activities vary in the degree to which they provide the leader with an opportunity to condition the behavior patterns of the participant so that they move in the direction of right responses.

The argument to be here advanced is really a summary of the elements of sound methodology. The question you must ask yourselves is, how far do the physical education activities provide you with hygienic opportunities to shape the personalities for which you are responsible, and which of the physical education activities provide the greatest opportunities for performing these most difficult and most thrilling of all educational obligations?

LEADERSHIP OPPORTUNITIES

A. EDUCATION IS A DOING PHENOMENON

This criterion represents a stress, rather than a change of view. It has always been realized that changes can only take place as individuals react to situations. The stress of Dewey and his followers, however, on this particular point has made us increasingly realize the necessity that the child must be an active participant in the situation in order that it have educational results. *Activities, then, may be evaluated according to the degree to which they demand that the individual be an active participant in them.* To use the illustration of Dewey, a classroom situation is often such that the child may be present physically and absent mentally. Remembering that this is an illustration rather than an exact scientific statement, we can see its significance. Activities may be tiered in the order of the degree to which they demand, by their very nature, that an individual be an active participant in them.

B. THE DEGREE AND NATURE OF THE INTEREST

Accepting the premise of Thorndike and Gates, that the human organism is endowed with certain neurological patterns which are expressed as wants, these wants are manifested to the outside world, of which the teacher is a part, by interests. Interest is the beginning of the educational process. Without it the situation fails to have educational value. With it, it has an educational value partially determined by the nature and the degree of the interest.

We may set up that there are some interests which are fundamental or grow directly from the wants with which the individual is endowed. A loud noise is a fundamentally interesting phenomenon. It is true that the human organism may be conditioned so that it ceases to give interest to a loud noise, but it is certain that unless that conditioning has taken place, a loud noise will demand attention and its concomitant interest. It may be said, then, that certain phenomena in the individual's environment are fundamentally interesting, or interesting in themselves as opposed to interest in the result which will accrue. To illustrate: a baby will be interested in the rattle which is tied at the head of his crib as a fundamentally interesting object, because of the noise which it makes and the movements which it describes in space. The rattle becomes, to the child, a fundamentally interesting object. To the adult, the rattle is a secondary interest; it is interesting to him as a means of obtaining desired responses from the child.

Physical education activities may be considered from this point of view. Are they activities which are *interesting in themselves*, or are they activities where the interest is in a second or ulterior motive, the interest being not in the actual doing itself but in the results which will accrue? It is possible to tier activities or to evaluate them according to the degree to which they are fundamentally interesting, it being assumed that a fundamentally interesting activity will, by its very nature, tend to demand attention of all, and may, all other things being equal, be superior as a conditioner of personality to an activity which is secondarily interesting.

The span of interest is a second factor in this criterion. One of the methods of education is the discussion of the results of the activity after that activity is terminated. The span of interest of the activity determines the degree to which we can discuss this and the period over which we may discuss it. It is interesting to note that newspapers, which obtain their livelihood by studying and creating the interests of groups, can use athletic events for discussion for a period of at least one week and often much longer, knowing that the interest of the game which was played Saturday will stand the constant reiteration and rehashing of Sunday, Monday, Tuesday, Wednesday, Thursday, and Friday. It is difficult to discuss the problems involved in an activity, the interest in which ceases as soon as the individual stops engaging in that activity. It is comparatively simple to discuss the problem in an activity where the interest continues for a long period of time after the cessation of activity. We have, then, two aspects to our criterion of interest. First, is the activity *interesting in itself*? Second, is the *span of interest* such that we may use a discussion method of leadership after the cessation of the activity? Incidentally this is the time when most discussion must take place, for if we interrupt an activity in order to discuss the factors of this activity we often ruin it from the point of view of the individual.

C. THE DEGREE OF ATTENTION

Attention is apparently a psychological concomitant of interest. The degree of interest is measured by the degree of attention. It is a question whether this should be a separate criterion or incorporated under interest. To the teacher, the degree of attention is the criterion of the degree to which the individual is responding to the situation. Again, the criterion of fundamental or secondary attention may be established.

There are some activities, which, by their very nature, demand attention. There are others where we attend to the situation in order that we may get to the results. This is too often the case in college education, where individuals attend lectures in order that they may pass examinations and ultimately obtain the desired end, the degree. I presume that this activity would be rated comparatively low on this criterion, as compared to that which demands, by its very nature, that the individual attend to it, irrespective of the ultimate ends.

D. SATISFACTION AND DISSATISFACTION

It is usually stated that the degree of satisfaction in the accomplishment of the task and the degree of dissatisfaction in the failure to accomplish the task, mark the extent to which the individual will continue to give interest to the particular activity needs; or, reduced to the naivest statement of elemental psychology, *we repeat that which is satisfying*.

Satisfaction, again, may be looked upon as being fundamental or secondary. I may be satisfied with a thing by the very nature of the thing, or I may find my satisfaction in those things which I may obtain by performing this particular activity. A fundamentally satisfying activity is that in which the activity itself is satisfying. There are many activities which are remotely satisfying, that is to say, the satisfaction comes through some ultimate change which will accrue as the result of the activity.

If we are establishing a tier of activities according to the degree to which they are satisfying, then it would appear that those that are fundamentally satisfying should be rated highest. Where an activity is secondarily or remotely satisfying, if I change the end purpose that activity may cease to be satisfying. If I am interested in maintaining a sylph-like form and reduce the amount of sugar which I eat in order to obtain this end, then the reduction of sugar eating becomes a secondary satisfaction; the fundamental satisfaction is in reducing. If I can change the concept about reducing, however, in which sugar eating is held to be a desirable aspect, then the satisfaction in sugar as such is entirely changed.

If a child plays for the sheer joy of play, and if play is the type of activity in which the joy of doing the thing itself is that satisfaction, then it becomes a fundamentally satisfying activity. The question has arisen during past football seasons concerning football. Some college players have made the statement that they played football for the social prestige

and the ultimate rewards attached to it. Then, in that case, football is not a fundamentally satisfying activity to that individual. If football, however, by its very nature, is the type of activity which in and of itself is satisfying, irrespective of the ultimate reward, then it becomes a fundamentally satisfying activity.

E. CONDUCT SITUATIONS

The individual is educated at the point of choice. The educator can only move from those issues where there is a choice of behavior. It becomes his task to insure, through his techniques, that the individual will choose rightly and feel as a result of that choosing that *he himself* made the choice. It is possible to evaluate activities according to the degree to which they provide opportunities for the individuals to make choices. Again it should be realized that the way in which they make their choices is the problem of leadership not of evaluation.

The question arises in connection with the physical education activities as to what opportunities they provide for the individual to stand at the crossroads of selection, to choose this or that form of behavior. Without a choice there can be only one way of acting, whether that be good or bad. It is assumed that in the complex civilization of which we are a part the natural way of acting is, in most cases, not correct. The process of education is that of making natural activities unnatural, so that individuals may *conform to an unnatural environment and appear to be natural*. The opportunities for achieving this are through the choice situations which are present in the activity.

The question of the importance of the choice to the participant must also be considered. Are the choices as they are made *felt* to be important to the participant? Are the choices which John makes in a class of geometry felt by him to be as important as those which he makes in a game of baseball? We have often lost sight of the participant's feeling of importance in our own concept of what we or society consider to be important.

Situations in which the educatee must shape his conduct may be reactions and conditionings to inanimate, animate, and conceptual or idealistic environments. The question before us is: To what degree do the physical education activities provide opportunities for situations in which the individual must make personally important choices concerning the world of which he is a part, inanimate, animate, and idealistically?

THE CRITERIA APPLIED

I have been asked to present to you the characteristics which I consider necessary as effective physical education for personality development. These I have attempted to organize as criteria for evaluating your activities in the discussions which are to follow. Perhaps in fairness to you I should present my own point of view concerning those activities which are our professional tools.

I consider the play type of physical education activity to be an outstanding opportunity for personality development. Let me in a running commentary apply the criteria presented to the play type of physical education activity.

A. CRITERION OF DEVELOPMENT

The first criterion, that of development, is based on the fact that it is necessary that there be an ever increasing power to act efficiently in increasingly complex situations. From the point of view of skills, of neuromuscular ability, I think the increase here is obvious to you all. I am not concerned with the increase in skill and its relationship, for example, to the ability to dodge automobiles on the street. If the physical education activities are worth while, then an increase in skill which will lead to a further participation in these activities will in itself be justified.

We can also accept, I presume, that the physical education activities make a great contribution to the organic development of an individual, and, further, that a balanced organic development is one of the primary assets of health. I do not intend to discuss this to any great extent, as I feel that in personality education we are not concerned with health for health's sake, but in the direction which behavior takes; health as it is used is our concern at this time, and not health as a "status of the organism."

It has been assumed that the field of interpretive development, sometimes termed "intelligence," is the peculiar prerogative of classroom procedures. I want to suggest that the physical education activities, because of the extent and intent of the manipulations both of inanimate and animate objects of the environment, provide great opportunities for the individual to develop ability to interpret such phenomena. The illustration of the child playing in a ball game is sufficient to indicate the constant interpretation which must go on. The child is compelled to interpret his own behavior as it relates to the inanimate objects and to his playmates, which necessitates the interpretation of the behavior of the members of the play group. It should be noted that these interpretations are in actual living conditions, not formulas of how an individual should live, but conditions in which the educatee's behavior by the very nature of the activity must be modified in terms of the members of his group.

It has been stated that emotions must be expressed and can be conditioned as can any other aspect of the human personality. Physical education activities of the play type provide great opportunities for this emotional expression. The high degree of excitement, the great emotional content, and the deep feeling tone which are present in play activities illustrate this point.

I am purposefully avoiding a detailed discussion of these developments, because I am anxious to stress the opportunities in the physical education activities for the direction of these developmental changes

which accrue as a child engages in play activities. I do feel, however, that we should pay more attention to the opportunities for the interpretive and impulsive or emotional developments than we have done. It has been assumed that physical education is primarily a factor of organic change. As the school man visualizes the school curriculum, the physical education activities are justified because they provide the organic development, while the other aspects of the school look after the interpretive development. The problem of departmental responsibility for emotional expression and development has bothered him considerably. He finds it a little difficult to see that this very dynamic force and often the catechistic aspect of an individual's personality is a legitimate educational responsibility of the school.

I am anxious, however, to stress a fifth aspect of development which appears to me to be essential. It is the factor of *integration*. We are less concerned with any single aspect of development than we are with the integration of all aspects of development into a functioning whole. Dewey demands that there be "spontaneous activity." "Events must happen to him (the child) in a way to bring *full* and interested response. It is altogether possible for the child to be present physically, yet absent mentally."³ Burnham has suggested that integration is obtained through "attentive coordinated activities."⁴ He gives us as an illustration the child-at-play as compared to the same child in a classroom situation. Whereas we may walk into the playground and the child will be oblivious of our presence, we may walk into the classroom and in most cases he will immediately give attention to this new disturbance. In the first situation, from Burnham's point of view, the activity by its very nature demands this coordinated attention, or deep concentration. If one of the keystones in mental health is "attentive coordinated activities," then the play type of physical education activities becomes an excellent means for this personality integration.

We can no longer evaluate a subject or a group of activities solely by their contribution to *one* of the attributes of an educated individual. We must also take into consideration the relationship of the development of this one attribute to all other attributes; in other words, to the total personality of an individual. If the organic development of an individual is so stressed that it leads to a lack of balance, then that is poor education. The segregation of a group for the correction of defects may be exceedingly efficient for the removal of the defect but if it leaves behind an introspectional neurosis, then it is poor education.

It is easier for us to think of the individual in parts or chunks than it is for us to think of him as whole. Our training and our outlook have

³ John Dewey, *Interest and Effort in Education*, p. xiii. Boston: Houghton Mifflin Co., 1913.

⁴ William H. Burnham, "Development of a Wholesome Personality." *Symposium on Physical Education and Health*, p. 192. New York: A. S. Barnes & Co., 1930.

built in us habits of evaluation according to items of learning. In personality education we will have to see, beyond this, each item of learning in its relationship to the whole. This is an exceedingly difficult task and one to which we must constantly apply ourselves.

B. CRITERION OF INTEREST, ATTENTION, AND SATISFACTION

Assuming that the primary purpose of personality education is that of establishing forms of behavior and attitudes which will insure that the individual acts hygienically and correctly; then the opportunities in the activities for the establishment of such behavior become a primary consideration. What are some of these opportunities for direction in terms of interest, attention, and satisfaction? I want to suggest the process of education as that of working from those things which are naturally interesting and satisfying to the establishment of interest and satisfaction in things or concepts which are not naturally satisfying or interesting. "Our whole policy of compulsory education rises or falls with our ability to make school life an interesting and absorbing experience to the child"; and, Dewey continues, we "must select these activities with references to the *child's interests*" which are self-initiated activities.⁵ Play activities appear to be naturally interesting to a child. There are very few individuals for whom we have to set up play as a sugar-coated pill. Play, however, has been used as the bait to attract the child to many things which he did not like to do. As children or adults play, they are not interested in health or character. The very character of play demands by its definition that the activity be interesting in itself. Play is a psychological condition, rather than a particular group of activities. Anything may be play. Physical education play activities, however, appear to be characteristic ways of playing, which if you wish are unlearned. I do not mean by that that an individual would naturally play basketball. I do mean, however, that running after balls, running after other individuals, play with danger areas, and the manipulations of children are natural ways of acting which to the child are playful.

I have discussed a little the deep attention which characterizes play. All of those who have played realize the significance of this statement. You cannot think of other things while you play. A game appears to be naturally attentive and to offer satisfactions which insure a long span of attention. I wish to maintain that play is naturally satisfying, that the child finds great satisfaction in playing for play's sake. The rules of a game are usually established by adults, and are neither particularly interesting nor satisfying to the child. The child, however, will gradually incorporate these rules of behavior into his own playing until they become a part of the satisfaction of playing. This is true so long as the irritation of the rule does not offset the satisfaction in playing. If it does, then the child will cease to play. This as I understand it is one of the

⁵ John Dewey, *Op. cit.*, p. 14.

fundamental tenets of sound educational procedure, that of incorporating those things which are not satisfying into the realm of the child's satisfaction through the drive of fundamental interest. In play this is happening all the time by the very nature of the game. Play is basically interesting and satisfying and it provides a means of departure for the establishment of ethical codes of behavior.

C. CRITERION FOR THE OPPORTUNITIES FOR LEADERSHIP

I am assuming in this discussion that the play activities are unmoral. That they are neither good nor bad. The qualitative aspect is in terms of the direction which the individual's behavior takes in play. It would appear to me that if I desired to set up an institution for the education of potential racketeers that I would certainly use the play activities as a means of doing this. I would require integration. I would wish to use those activities which provide for me an opportunity of working from the fundamental interests of the youth. I would also desire to work from the fundamental satisfactions to the establishment of secondary satisfaction in unlawful behavior. Such being the case, I feel that the physical education activities are but means for the ends that we desire. These ends will be achieved according to the type of leadership and the opportunities for leadership which are present in the activities.

Let us examine physical education play activities from the point of view of the opportunities in them for leadership. For leadership to begin there must be present a child interested in doing something with an opportunity of obtaining satisfaction in having accomplished that task. These we have already discussed. The conduct situations which are present in an activity become a means of determining the opportunities for leadership. They are the situations in which an individual is compelled to make judgments and to act in accordance with the actions of other human beings. The number of these conduct situations presumably should have a direct bearing on the number of opportunities for leadership. One of the procedures with which I am familiar for indicating the relative value of physical education activities is to go to the gallery of a gymnasium with a notebook and to make at that time very careful notes on all the conduct situations which occur during a game of basketball. You will find without a lot of experience that it is impossible to get all of them down for they are occurring so rapidly. Then, to pass from that situation into an ordinary classroom and again list all the situations you find there. You will not find it very difficult to keep pace with them as they occur.

In the play activities every individual is reacting with and against every other individual in the situation. It is a living condition and not an artificial one. It is one in which the educatee's behavior constantly impinges on the other elements of the situation. In a game of basketball every move which the individual makes affects every other individual of

his team and of the opposing team. Further, every movement which he makes is his own responsibility and he is held immediately responsible for the results of that action. In play activities there is rarely an opportunity for "getting by with it." Punishment or reward is immediately forthcoming. We unfortunately live in a civilization where most of us are aware that the results of our behavior will not be checked upon immediately, and possibly not in the future as we see it. We live in an age where if you "get by with it," it is justified. The responsibility for the behavior can usually be deputized to other individuals. Due to bad leadership we sometimes incorporate this attitude into play. In a "pure play" activity there is great opportunity for *self-direction* as the individual is responsible for his own behavior, and must take this responsibility.

SUMMARY

The function of the educator (teacher) is that of knowing children and their needs, of knowing situations (activities) and their relative value, of knowing how to prescribe, present, and direct through these situations in order to condition the child's behavior so that it conforms to the best standards of the society of which he is a part. The teacher of today is a *social engineer* rather than a *pedagog*. He is a *manipulator of opportunities* rather than an *impressor of facts*, he is a guide in an unfolding, captivating universe, rather than a "pusher" into unknown dark and often a noisome hypothesis. His prerequisites are a knowledge of children rather than of facts, a knowledge of the value of activities for full living rather than a traditional acceptance of knowledge for knowledge's sake. He is a friend, guide, and counsellor rather than a disciplinarian, pronouncer, transmitter, and punisher. To perform his task the educator must have adequate tools with which to work. Tools which will provide him with the opportunities to lead people toward the desired ends. The activities which he uses are his tools.

This conference has been designed to honor a man who has demonstrated that physical education is an effective tool for personality development. The purpose of the conference is to catch by the spoken and written word that which he has demonstrated; a picture of physical education activities as effective tools for personality development.

The function of physical education in the total education of people has had many vicissitudes. It has been recognized as the basic part of education particularly by some primitive groups of peoples and by the Greeks in the "Golden Age." It has been accepted as a means of preparing for body-work—usually national defense and offense. It has served the purpose of temporarily reinvigorating sensually depleted bodies. It has been looked upon as a necessary evil to be retarded whenever expedient. As a palliative for leisure-time evils, it found its first justification in the American college curriculum. With the recognition of the unnatural nature of the classroom situation it is accepted as a means of reducing the

evils of the immobility of the classroom. The industrial age brought with it the reduction of total-body activity and the excessive use of accessory, fine manipulatory movements. Physical education again steps in as a means of counteracting the immobility of the industrial age. The constant increase of the "average man's" leisure time has brought with it the problem of how to use to best advantage this leisure time and again we turn to physical education activities among others.

Today we are considering physical education activities as opportunities for personality development and in doing so we have again caught the vision of our professional forefathers, the classical Greeks. Burnham, the mental hygienist and educator, states, "Physical education is the oldest, the simplest, the wholesomest of all kinds of formal training. Its results are recorded, not in ranks and parchments, but in muscle, sinew, red blood, in memories, behavior patterns, interests, attitudes and ideals, artistic and personal." The results of physical education, particularly of the play type, have been left in the personalities of the players, an area which we have not considered or measured in the formal schooling of today. The personality results accruing have not always been desirable, but that has been due not to the inadequacy of the activities or situations but to the leadership and the anticipated results looked for by these leaders which have all too often been skill and body building, rather than a fully developed wholesome and individually socially healthful personality.

A Symposium "Studies in Personality Growth and Development and Their Implications for Physical Education"

I. Contributions from Physiology

By ARTHUR H STEINHAUS, Ph.D.

Professor of Physiology, George Williams College, Chicago

WITH your permission, Mr. Chairman and members of the Institute, I shall extend the scope of my presentation to include contributions from the larger field of biology which includes physiology.

It is a privilege to represent the biological sciences in this symposium and to discuss some of their contributions to the problem of "Personality Growth and Development, with Implications for Physical Education."

May I, at the start, confess a personal shortcoming? Being a physiologist, I have merely a layman's understanding of the term "personality." Rarely is the term found in my professional reading. Yet from early conditioning in sociology dating back to undergraduate days and from the incessant stimulation of my faculty colleagues, most of whom are trained in the social sciences, I have retained enough of that "universe of discourse" which, coupled with my modest share of "original nature," led me recently to venture an interview with my neighbor, Professor Robert E. Park, the fountainhead of the sociology which I imbibed in those early years. This session helped me to see that such biological terms as organization, integration, and individuation, steeped, as they are, in biochemical slimes and brute metabolic rates, bear a sort of palaeozoic relationship to the loftier postglacial terms characteristic of that culture which has evolved, among many others, the concepts of today's symposium topic. Professor Park also introduced me to Gordon's book entitled *Personality*, from whose stimulating introduction let me quote two sentences: ". . . personality might therefore be defined as the emergent synthesis of the bodily and mental attributes of the individual in relation to the environment in the most comprehensive sense." More to my simple tastes is the following: ". . . to define a man's personality adequately, we must describe his parentage and race, his bodily structure, his intellectual attainments, his emotional reactions, his practical achievement, and all the slings and arrows of outrageous fortune that have fallen upon him from birth to death." In this latter statement there is, I believe, sufficient text for the three sermons of the morning. Not only shall it guide me in selecting the "Contributions from Physiology" part

of my assignment but in "the slings and arrows of outrageous fortune that have fallen on him from birth to death," I shall perhaps also find the "Implications for Physical Education."

In the last month there was announced almost simultaneously from American and Russian laboratories the epoch making discoveries that the gene, the ultimate particle which determines the genetic character of the personality, that infinitesimal bit, about sixteen millionths of an inch in diameter, which, with its thousands of fellows, comprises the substance of chromosomes, *had been seen* and its position on the chromosome correlated with the inheritance pattern of the animals in whose cells it was found. From Gregor Mendel's pea experiments of 1859, through Bütschli's discovery of the chromosome, and Morgan's life-time of glittering researches which proved that there *must* be a gene, down to this climaxing demonstration of its actual existence, marks not only a triumphant procession of discovery but at the same time calls anew to our attention the need for applying these findings to the problems of race betterment by selective breeding. It is probable that this new technique of staining chromosomes which makes the gene visible under high powers of the microscope will further accelerate discoveries concerning the laws of inheritance. But what use are we making of our present knowledge? President Doggett of the Springfield College once said that physical education must have a health education program which will extend over three generations. Who is now teaching our young people wise mate selection? Who is arming them with the facts so that they can intelligently examine a family tree and judge its sap from the fruits found on its several branches?

It is clear that this is not a program for adult education. The graduate school is too late even if all people attended. Today, the upper years of college are often "post-committal." Eugenics education must recognize the human propensity of "falling in love." But there is sufficient evidence that the person who *knows* is more likely to "fall" in the right direction provided he knows before he starts to "fall." This makes it clearly a problem of *late high school* and *early college education*. Who has the wisdom and the confidence of young people to guide them at the right moment?

Until this gap is filled in our educational plan the human race will not profit to the full extent from the already established genetic principles.

HAVING thus disposed of biology's contribution to that part of the personality which is inherited let us examine briefly a few contributions to our understanding of the integration of the individual. As soon as the fertilized egg divides into two cells a new problem arises. It now becomes necessary to hold these two cells together to make of them an individual. If this does not occur the cells will part company and there will

be two individual cells. As cell division continues and the embryo grows this problem of integrating a mass of cells is accentuated. Not only must the entire mass be held together but it must be made to function together, ultimately one part must see; another must digest; another must produce movement. The parts must take on form and shape which will fit them for their tasks and they must be located in that part of the animal where they can be of use. This domination of the organism over its parts, this submergence of the individual cell to the organization of the whole received recognition in modern biology beginning about 1890 and is represented in the "organismal" viewpoint. The most satisfactory explanation of the mechanism responsible for this integration we owe to Professor Child, whose experiments on planaria proved that organization resulted when one portion of the animal dominated the rest by continually stimulating it. That part of the animal which exhibited the highest metabolic rate, i.e., that part which lived fastest, set the pace for the remaining parts and through stimulation kept them in domination. This most active part is the head or apical end and characterizes itself in this way long before nerve tissue or brains appear in the animal kingdom. In fact the brain and nervous system are later structural developments for more efficiently sending these messages which dominate and integrate. Thus, the head-end is not determined by the location of the brain but the brain develops in the place which is the head-end by virtue of its higher metabolic rate. This is putting it in simplest terms for the simplest animals. In higher animals there are introduced many subheads, so to speak, and major and minor axes of organization, all as far as we know, in accord with these fundamental principles of organization.

From the newer studies in embryology come many interesting illustrations showing how the organism as a whole early dominates the development of its parts. If that portion of a very young embryo, normally destined to become an eye, is grafted into the flank region of another embryo it will become skin, not eye. If the reverse graft is performed the part which was to become skin will become an eye, etc. Thus in this early stage the destiny of the graft depends on the organizing power of the recipient organism. If one waits to graft just a few hours longer the results are opposite. Then, a portion of embryo removed from the region destined to become an eye will develop into an eye no matter whether it be grafted to the skin of the abdomen, into an internal organ, or on to an artificial medium. Similarly, the part which ought to have formed brain tissue will do so no matter where it is placed. What is responsible for this sudden change from plasticity to specialization? The secret lies in the development of a region of very high activity on the embryo's future back. This region, which marks the location of the future nervous system, is called the dorsal lip and begins to manifest its remarkable powers just when the plastic period closes. May I quote briefly from Wells, Huxley, and Wells, *The Science of Life*, p. 519:

"If at this stage a piece of dorsal lip be transplanted into the flank of another embryo, it not only continues to develop as it would have done if left in place, but it causes the surrounding tissues of its host to grow into an orderly arrangement of nervous system, notochord, muscle-segment and the rest; in brief, it makes its host produce a second supernumerary embryo. And its action is not specific. The dorsal lip from one kind of newt will set off the tissues of another kind of newt, and can even activate those of a frog.

"In vertebrates the dorsal lip region may thus be called the organizer, for through its action the embryo first becomes truly organized. Before this moment the developing egg behaved as a whole; from now on, until unity is again re-established by outgrowing nerve-fibers and circulating blood, it is a mosaic of parts, each working out its own destiny and fitted together as a sort of chemical jig-saw puzzle."

In the mature forms of higher animals we look to the nervous system for an explanation of integration. Through the nervous system every part of the body is directly or indirectly in potential communication with every other part. This means that stimulation of any sense ending may result in nerve impulses being delivered, ultimately, to any or all muscles or glands. Some of these pathways for delivering impulses are patent and "ready to go" at birth. These are the unconditioned reflexes which clear largely through the spinal cord and lower portions of the brain. If one sense ending is stimulated at a time, there follows one response at a time, and all is simple, as when a physician elicits one reflex by tapping a tendon and after the leg has jerked he next shines a light into the eye. But the world in which we live is not so simple. Scores of sense endings in all parts of the body are under incessant bombardment by as many different stimuli. Each stimulus expects, so to speak, a response. But the leg cannot be flexed and extended at the same time. The eye cannot move right and left at the same moment nor can the iris open and close simultaneously. Were such an attempt made, the organism would either disintegrate or tie itself up into an equally useless knot. That such a dilemma is normally averted we owe to the integrative action of the nervous system. In his most careful experiments on animals whose brains had been cut off, Professor Sherrington made his now famous experiments to demonstrate some of the laws governing the integrative action of the nervous system. He found that even the brainless animal gives right of way to that reflex which will draw a limb out of danger when it and a reflex arc of opposing action are simultaneously stimulated. Thus the animal responds to what is called the prepotent stimulus. Similarly, the mechanism of reciprocal innervation accounts for the smooth movement of a limb by providing for relaxation in the muscles which oppose the contractors, thus preventing flexors and extensors from wastefully opposing each other. All this integration, and more, occurs without a brain. A dog will, for example, produce perfectly coordinated, that is, integrated, running movements; he will raise a leg and scratch a specific portion of the body—all without a brain. The spinal cord, true to its character as a nerve center, is an integrator.

But there are yet higher centers of integration. There are **reflex centers** in the brain stem which cause body, eye and head, mouth and feet to act simultaneously as though they belonged to one and the same animal. Again these coordinations do *not* require for their smooth performance any cortical tissue. The famous Goltz dog—a dog from whom the cerebral hemispheres have been removed—is capable of walking, running, biting, snarling, even seeing and hearing in a simple fashion. He is able also to distinguish between bitter and normal tasting meat. He acts in all of these relations as a thoroughly integrated individual. In some instances it has been possible to demonstrate exactly what part of the nervous system is responsible for a particular set of integrated actions. Recently, physiologists at Harvard have shown that the nerve center responsible for the behavior known as rage, in the cat, lies in the posterior portion of the thalamus just above and in close connection with those centers which govern many of the visceral organs. Thus, is finally located the "seat" of the emotion of rage, and we see at once why such an emotion is accompanied by all kinds of visceral *concomitants* which by earlier philosophers had been taken as the *cause* of the emotions. When this portion of the thalamus is removed the cat ceases to "get mad all over at once" in thoroughly integrated style. Now only isolated portions of the reaction are called out by the same stimulus which previously brought a complex integrated response.

The Harvard cats demonstrated a still more important point. With their brains cut off down to the thalamus they flew into fits of rage much oftener than would a normal cat. The least scratching of the skin would bring on a complete, uncontrolled, though fully integrated spasm of rage. Similarly, the decerebrated Goltz dog might bite his best laboratory friend who merely tried to place him comfortably in a cage. The fact is that a decerebrated dog or cat *knows no friends*. He has only racial personality. It is useless to give such a dog a name for he can never learn to distinguish it from any other sound. Whereas a normal dog may be coaxed to eat bitter meat, the "brainless" dog cannot change his behavior enough to swallow even a mouthful of it. He is, in a way, safer even though he cannot be called wiser.

Already we have intimated the integrative functions peculiar to the highest brain centers in the cerebral hemispheres and cortex. Here are the centers which may form new patterns of integration. Here lie the headquarters which may suspend almost any of the more or less fixed response patterns of the lower centers. Here are found the patterns which normally *inhibit* the explosive discharges of the thalamic center of emotion. Here may be formed the habit of controlling one's tears as well as one's tongue. But none of these controls are inborn. They must be acquired through experience.

It is a peculiar property of this same cortical nerve tissue that it is able in some way to record all past experience. This it seems to do by

retaining a trace of all nerve hook-ups which at any time were simultaneously activated. Thus, if nerves from the nose are stimulated by a certain scent, while simultaneously those from the ear are activated by a certain sound and those from the skin by a certain painful stimulus and so on, many reflex arcs are called into action. Each of these will, in turn, initiate activity in all other combinations in which it was previously involved. Thus are activated at one time many net-works of nerves representing present and past experiences with the outside world. Integration must take place. It does take place continuously and simultaneously as each successive nerve-net hook-up is innervated in this process of memory or recall. The ultimate action, in a normal person, will always be an integrated one and will be determined in accordance with the fundamental law of prepotency. Whether or not the resulting action will be a fitting response, delicately adjusted to the many stimuli in the immediate situation will depend on how nearly responses to similar or related stimuli in the past are available as records in the cortex and how, and in what order, they are recalled.

Needless to say, this is essentially the conditioned reflex concept of integration and an attempt by this route to describe the nervous system's contribution to the formation of personality.

Recently it has been shown by experiments on monkeys that the fore-brain is in a special way related to this function of retention or recall of previous experiences. The monkey is placed in a small room. The door has a window which is covered by a shutter. Outside his room and with him watching through the window a bit of food is placed in one of two holes and covered. The shutter is now drawn. After one to five minutes the door is opened. A normal monkey will invariably go directly to the hole containing the hidden food and consume it. A monkey from whom has been removed by surgical methods the anterior part of the cerebral hemisphere will go to the wrong hole as often as to the right one. If, on the other hand, the operated monkey is released from his room without the shutter having first been drawn he will find the food directly. But, if while on his way to the right hole, his attention is distracted even momentarily as by someone whistling, he is immediately thrown off the track and as an animal without memory or association, he can then find the food only by random trial.

There is, besides the nervous system, another great coordinating or integrating mechanism, namely, the endocrine system, composed of some eight or more glands of internal secretion. All of them exert most profound influences over the entire body. Lack of time forbids reference to more than a few illustrations.

In addition to certain metabolic regulatory functions, the thyroid gland seems to govern metamorphosis in animals and probably something comparable in man. The tadpole has a very inactive thyroid gland. When this gland develops the tadpole become a frog. If the

American bullfrog, whose tadpole life is normally three years, is fed the thyroid gland of some other animal it becomes a fully developed frog in its first year. This frog will however be much smaller than if the normal three years had elapsed. From very small tadpoles there can in this way be produced bull-frogs the size of flies. The Mexican *axolotl* which is virtually a tadpole throughout its life is transformed by less than a milligram of thyroxin into a form of land salamander *never seen in nature*.

Last September, Rowntree, Clark, and Hanson reported the startling discovery that the thymus gland, situated in the upper chest region, has a marked influence on growth. These workers injected young white rats with an extract from the thymus gland of two- to six-week-old calves. The first generation so treated showed no effects. When, however, the treatment was continued in succeeding generations raised from this stock, there was observed an accruing precocity in the second, third, fourth, and fifth generations. The observations were as follows. Between the third and twentieth days the rats of the fifth generation with thymus feeding weighed more than twice as much as the untreated controls. Their teeth erupted on the first day instead of the ninth or tenth; hair appeared and eyes opened on the third instead of the fourteenth to seventeenth day. Other characteristics showed similar acceleration. Even though the treated animals grow so much more rapidly, their ultimate size is no greater. They merely arrive at maturity much earlier. These workers add that "The psychical precocity is as striking as the physical in the thymus treated strain of rats. Thus, fifth generation test-animals appear *almost* as capable and alert as normal rats of sixteen to twenty days of age. Weaning is possible at three days of age." The normal time for weaning is approximately twenty days.

It is too early to indicate the practical implications of these studies for man. It is possible that one could develop heavy-weight football teams in the fifth or sixth grade if it were possible to start injections four or five generations before the squad was needed. Of greater interest is the speculation on the average age of college freshmen were there a corresponding acceleration of mental maturation. This may yet offer the solution to our neighboring universities' attempts to shorten the total schooling period.

Let it also be recalled that one of the hormones of the pituitary gland determines *ultimate* size of an individual. It accounts for the dwarf and baby-doll type on the one hand and for the 9-foot giant on the other. Daily injections of the hormone in one case increased the height of a young dwarf 5 inches in 18 months; thus man "can by taking thought add a cubit to his stature." This gland has also frequently been linked with such conditions as epilepsy and insanity. Cushing found abnormal pituitaries in all of 70 psychopathic cases studied in one hospital. Hoskins reports a recent study by Rowe in which it was found that two-thirds of a series of 104 children exhibiting

behavior problems showed evidence of endocrine abnormalities mostly of the pituitary gland. Many of these cases were given pituitary material with consequent improvement in the personality defects formerly present. None of these reports are above criticism. Yet there appears to be "sufficient smoke to suspect a fire." More research is needed!

Concerning the rôle of the sex glands in determining the size, strength, virility, form, and many other bodily as well as behavior characteristics of the individual no lengthy description is necessary. It should be mentioned that the active hormone may be extracted from the urine of men though it is absent in the urine of boys and the aged. It is now also known that the pituitary, the thyroid, and the adrenal glands may modify gonad activity. Hoskins summarizes the influence of these glands on personality in the following quotation: "Directly or indirectly the gonad hormones serve as the dominant theme in much of the world's best and worst literature. The contrast between a virile, dominating personality and that of a weak, whining emasculate is all-illuminating. The impulse to romance is but a slightly disguised aspect of the mating instinct. The rich emotional life centering in the home, when home-making is successful, and the manifold disharmonies when it is not, all have their source directly or indirectly in the sex instincts. These in turn are dependent upon the sex hormones. With this element eliminated from life little of romance would be left."

We have recognized two integrating mechanisms on whose activities the development of the individual and the expression of his personality is ultimately dependent. The one is nervous, the other humoral or chemical. That their ultimate mode of action is not so different becomes clear from very recent discoveries which show that nerves act upon muscles and other nerves only by secreting an infinitesimal amount of acetylcholine, or of sympathin, an adrenalin-like substance. In this sense every muscle-nerve ending, every nerve terminal, verily every synapse is the site of glandular activity. Not only does this discovery put a new interpretation on the activity of nerves but there is already evidence that the stimulating substance produced in a nerve ending may be carried by the blood as are hormones to far distant points there to produce a secondary effect. This chemical, glandular character of the nerve endings makes it also a little easier to understand how mental or nervous activity may produce changes in the biochemical character of the body. In other words, it is easier to see how "mind may affect the body," sometimes called the psychogenic origin of disease or other body changes.

WHAT I have said so far may aid a little in understanding certain aspects of personality, but leaves you, no doubt, with the question: what are the implications for physical education—what can we do about it? I shall return to this question at the end but first let me

discuss the influence of food and of muscular activity on physical growth. These are factors which we can control *much as does the apothecary control the nature and size* of the dose of his potent drugs.

Dr. Samuel Brody at the University of Missouri Agricultural Experiment Station has investigated the influence of food on the growth curve of rats, chickens, and cattle. He has found that by improving the diet of rats they could be made to approach their mature weight at a speed twice that of rats fed on the prevailing normal diets. Though their ultimate mature weight is not appreciably greater, the improved diet is responsible for an earlier arrival at mature weight. The same holds true for chickens and cattle. The economic importance of hastening the day that cattle may be bred or sent to market is no doubt clear. Again we wonder whether it would be desirable to hasten the growth of children. Brody points out in this connection that the children of the laboring classes in England reach their full growth more slowly than do those of the wealthier classes. Thus the laborer's child at eighteen has the maturity of a sixteen-year-old in the wealthier class. The children of the non-laboring group attain their full height two years and their mature weight six years sooner than do the children of the laborers. There is reason to believe that here again the food factor is an important one. Whether the increasing average height of college entrants in this country is attributable to similar causes deserves consideration. To my knowledge we do not know whether the accelerated physical maturity brought on by dietary improvement is paralleled by corresponding mental maturity. There is an isolated experiment which indicates that the withholding of vitamin *B* for a time from very young rats curtails permanently their ability to learn to run a complex maze.

FINALLY let us inquire how exercise influences growth? Let us distinguish between growth in height which is entirely a matter of bone growth and growth in weight which may be mostly muscular hypertrophy when due to exercise.

The influence of exercise on bone growth is a much debated question. Stuhl, who took boys on board a "school ship" where a moderate amount of work was required of all, reports that boys from homes of the working classes grew a little while those from better situated homes actually became a little shorter. Floyd Rowe recently reported that junior high boys who competed in competitive sports grew less than boys who did not compete. He claims, however, that boys who took gymnasium five days a week without competition grew more than those who do not exercise at all. Kohlrausch claims to have observed that strenuous soccer training stimulated growth of the legs in college students. He cites also the instance of several bass viol players whose left hand were much larger than the right, as supporting the position that exercise stimulates growth.

The findings from animal experimentation seem on the whole to indicate that when a limb is inactivated or by some other method the epiphyseal cartilages are spared the pressure to which exercise subjects them, that then the bones grow a bit longer but thinner.

Kohlrausch, who has given much thought to this problem, attempts to unite these conflicting views in a theory that activity stimulates growth up to an optimal length. Beyond this it acts as an inhibiting agent. Lack of activity may therefore lead to too little growth or to growth which shoots beyond the optimum. This generalization agrees with observations on German boys engaged in gymnastics and athletics who showed earlier and more rapid growth but whose growth curves began to flatten at about the sixteenth year, while the non-athletic boys who started their period of rapid growth more gradually did not slow down at this age, and soon overtook the athletes. Unfortunately, in most of these studies the effect of diet and eating habits as modified by exercise has not been sufficiently controlled or parcelled out to give us a clean-cut story.

The influence of exercise on the growth of muscles is fortunately better understood. Any muscle which is taxed to the maximum of its strength will respond by hypertrophy. Muscle volumes may be increased from 50 to 100 per cent in this way. Whereas exercises of *strength* in which much work is done in a short period of time thus lead to hypertrophy, exercises of *endurance* do not.

The discovery that fatigued muscles stimulate the growth of tadpoles and blow-fly larvae which feed on them coupled with the discovery that such fatigued muscle tissue emits mitogenetic rays which stimulate growth in yeast cultures throws some light on the possible physico-chemical nature of this stimulus to muscle growth.

LET me conclude by summarizing a few implications for physical and health education growing out of the observations and ideas here presented.

1. The teaching of wise mate-selection directed toward race improvement has potent possibilities for personality development since much of our personality is inherited. This education must come at the high school and early college level. The health educator's program must be planned to affect three generations.

2. The conception of integration of the individual based on the dominating character of the region of highest activity (the organizer in the embryo) finds application in practice by more than the device of analogy. A physiologically active brain and nervous system integrate the body. When under anesthesia or in sleep these tissues become less active, this integration is less complete. Heightened neuromuscular activity directed toward a *single* undertaking as in a basketball game is to my mind a picture of a totally integrated personality. To accom-

plish this I conceive that some single though perhaps shifting portion of the brain must from moment to moment exceed in activity all others and thus dominate. The person whose attention is constantly divided instead of being absorbed in one thing at a time, I would interpret as tending to have simultaneously two foci of neural activity striving for dominance. This would tend toward a lower form of integration and if carried to pathological extremes might account for the phenomenon of split or dual personality. I trust you will pardon this wide excursion into the realm of speculation. If, however, my reasoning is sound, then we have, I believe, a neurological interpretation of the integrating value of any activity which requires total undivided attention of the participant. It is my belief that the recreative effect of a game or other activity is proportional to the amount of integration one exercises in its pursuit. I wish I could prove this.

3. Food and exercise exert marked influences on physical growth and development. Through their wise selection and administration, the effectiveness of that part of our personalities with which we express ourselves and in great measure influence others, may be brought to its highest expression.

4. One other practical implication, it seems to me, grows out of the facts I have presented, and that is that modern man must learn to relax. I mean ordinary physical relaxation. This is the only way to induce mental relaxation. Any form of control of the mind without physical relaxation is *inhibition not relaxation*, and is neurally at least as expensive a process as is less controlled action. Since the discovery that all nervous activity results in the secretion of tiny amounts of highly potent chemicals in the nerve-endings, and since there is evidence that these chemicals may escape from the site of their production and via the blood be carried to distant parts of the body, as from a dog's tail to his heart in one experiment, there is, it seems to me, an even more logical reason why we must learn how to reduce neuromuscular activity to its lowest levels.

Neural activity and muscle contraction is only one face of the coin—its reciprocal—inactivity and relaxation is the other. The price of an integrated personality capable of abundant and efficient adjustments to a complex, modern world is the *entire coin*.

II. Contributions from Psychology

By FRANK FREEMAN, Ph.D.

*Professor of Education, University of Chicago
(Abstract of Address, Edited by Speaker)*

PARALLELISM of *Growth Curves*.—Individuals who mature early develop more rapidly in respect to bone ossification. The correlation between height and intelligence, while not especially close, is significant up to the age of fifteen years. In general it may be said that tall youngsters are more intelligent than short ones, but this is not so in the case of adults because the relationship between growth and intelligence disappears with adulthood.

Richey's study on height and weight found that girls between the ages of six and seventeen have different weights in respect to maturity. Boys who attain puberty before fourteen are heavier. Growth is accelerated just before the pubertal stage. Early maturing individuals are stockier in build during growth and adulthood.

Studies in strength and skill indicate that the person over twenty years of age is superior to the child and adolescent. The older person can learn skills more easily and has more ability to stand strain. Such findings indicate a need for careful classification and grading of activities as to amount of skill required to perform and amount of strength needed. Activities should conform to the stage of development of the individuals.

Play and Recreation.—Play is the spontaneous exercise of a function. In children the development of play is attributed to the fact that children engage spontaneously in acts at the time of rapid development. Play is the joint result of a readiness of the nervous system and activity stimulated by the nervous system.

Play is a very important agent of development. Education is made up of two parts: (1) play, (2) formal instruction. Play expresses three main impulses: (1) exploration, curiosity about the physical and social world, (2) mastery of the child's own body so he may gain control over activity situations, (3) construction and creativity.

The relatively permanent types of play are: (1) sensory stimulation, (2) pleasure in movement, (3) motor skills, (4) constructive acts which become more and more complex, (5) reading.

The types of play which drop out after childhood are: (1) hiding and finding games, (2) tag, (3) singing games, (4) dramatic play.

Sex differences in play acts: Male, muscular strength and skill

games; competition and organized skill games made up of teams. Girls, the use of language games.

Attitude of the Present-Day Psychologist.—Like the physiologist, the psychologist agrees that the human organism is a unity. There is a close relationship between the different aspects of behavior. Such an act as relaxation is bound up with mental attitudes and autonomic functions as well as muscle tonus.

III. The Contribution of Psychiatry to Personality Growth and Development

By MISS CLAUDIA WANAMAKER

*Chief, Department of Recreation, Institute for Juvenile Research,
Chicago*

(Abstract of Address, Edited by Speaker)

THE TASK of the Child Guidance Clinic may be likened to the attempt to straighten out a ball of yarn which has become badly snarled, the yarn in this instance being the emotions. Inasmuch as a number of professional groups (psychology, physiology, and sociology) are also concerned with emotions, psychiatry is in somewhat of a quandary about its relation to these other fields. At present the field of psychiatry is not clearly defined, and at this stage of its development it is possible that the child may become purely incidental to the problem he presents. And since psychiatric workers are for the most part related to clinics, there is a danger that he or she may not be aware of the child's relationship outside the clinic. It is possible also that the work of the psychiatrist may be so related to pathological fields that his findings require considerable sifting and interpretation in order to be of much value to the field of physical education or recreation.

Perhaps the common denominator in the symptomatology of children frequenting the Institute for Juvenile Research is the feeling of insecurity or inferiority. Most important among the causes of such feelings would be: (1) parental rejection, which itself may be a symptom; (2) intellectual retardation; (3) physical handicaps; and (4) social rejection which may be a result either of personality defects in the child or of home conditions which have undermined the child's courage. Manifestations of this feeling include the shy, tender, fearful, type of person; the over-aggressive, bullying type; and the person who tries to convince himself that he does not want friends although his desire for friends may be exceptionally strong.

It has been the experience of the Institute for Juvenile Research and similar agencies that it has been quite difficult to have the children who come to them find normal play situations. A number of factors are involved in the difficulty:

1. There is little integration of agencies relating to child welfare. The emotionally sick child is shipped around from one to the other and perhaps all of them, with no common appreciation of his problems or common attempt to meet them.

2. The child guidance clinic may be so withdrawn from actual recreational situations that it may not know and appreciate the problems of recreation and of the recreation leader.

3. Because of poorly defined interests and meager social backgrounds, the children who come to it often need a rich program from which they may select at random a number of things to do, but due to the stereotyped programs of recreational agencies with untrained leaders for the most part, the individual needs of the child cannot be met.

The problem is whether those recreation leaders who speak of the development of personality through recreation are aware of their failures. Certain it is that recreation leaders often seem to have a compensatory attitude towards their job and make claims far removed from what they actually accomplish through recreation. The need is to look at programs realistically and honestly, and to establish far more research into the contributions of recreation programs to the personalities of those participating in them. Play is so intimately a part of children's growth that the province of the recreation leader is rich in contrast to that of other phases of child welfare in so far as the development of personality is concerned.

Some High Spots in American Physical Education

By ELMER D. MITCHELL

Sec'y-Editor, American Physical Education Association

IT IS a privilege to be present with you on this occasion as a representative of the American Physical Education Association. In my official capacity, I wish to recall to you the fact that Martin Foss was for seven years the representative of the Y.M.C.A. Physical Directors' Society on the National Council of the American Physical Education Association. Then again, I remember that he was one of that distinguished group of physical education leaders who guided the early destinies of the Middle West Society of Physical Education. He was President of the Mid-West Society in 1919, and in that year I heard him give the Presidential address at the annual meeting in Chicago. Of this address I should like to speak again later.

It will be a slight digression, but nevertheless a timely one, to speak of the long and happy association that has existed between the Y.M.C.A. and the A.P.E.A. (You can see that we physical educators were accustomed to initials long before the present vogue came in.) The Y.M.C.A.'s interest in physical education preceded that of the public schools, and the "Y" along with groups like the Turners played a strong pioneering rôle in awakening the public to the need of a sound program of physical exercise. Later, the introduction of physical education into the schools was also facilitated by the fact that a very large proportion of the teachers for the early school programs had received their physical education training in the Y.M.C.A. colleges. Today this situation still holds true when one looks at our school leaders. Our National President, Strong Hinman, is one example and I could point to William Moorhead as a state director and Dr. Frank Lloyd as a university professor to give the variety of services in which the "Y"-trained people are functioning in school programs.

And I have not yet finished this thought! The public schools must ever be grateful to the Y.M.C.A.'s for the use of their facilities before the schools were yet provided with them. As a young director in charge of a public school program, I can well remember how our basketball practices and games were held in the "Y" gymnasium, and how our students received their swimming instruction in the "Y" pools.

In relation to the national association which I represent here this evening, I would not want to leave this discussion without pointing out that some of the great leaders in Y.M.C.A. physical education have

also been prominent in guiding the destinies of the American Physical Education Association. Dr. J. W. Seaver, Dr. Luther Halsey Gulick, and Dr. George Meylan have been its Presidents. Dr. Gulick and Dr. James Huff McCurdy have been its secretaries and editors—the former for three years and Dr. McCurdy for twenty-four years. During all the years of the existence of our national association, the Y.M.C.A. Physical Directors' Society has been affiliated with it and has had a member on the Council to assist in its deliberative proceedings. Dr. John Brown, Jr., is that representative now and his sound advice is always a helpful influence at our Council meetings.

BUT now for my topic "Some High Spots of American Physical Education"! At first, I started with the idea of including an introductory statement of the important chronological events in the history of physical education leading up to the survey of present-day trends and problems. But after reflection I came to the wise conclusion that people today are little interested in the history of the past. They are too immersed in the present. They are floundering in the midst of a disturbed social order and are without the faith in spiritual leadership and ideals that once gave them the strength to meet reverses and to face uncertainties. Their primary concern is not so much with what has already happened, as with what is going to happen.

For this reason, I dispensed with any idea of singling out for you the important events of American physical education, historically speaking. I will, therefore, devote my discussion to the high spots of present-day physical education, as these seem to be indicated from personal discussions with our leaders and teachers, from professional conferences, from the articles and books that come to the attention of our editorial offices, and from general social and educational trends which have bearing upon the future of our own profession. In attempting this task, I hope that I may succeed as well as did the man whom we are honoring on the occasion of this Institute when he was called upon some fifteen years ago to give his presidential address to the Middle West Society of Physical Education. Among the things for physical education for which he made a plea at that time were a wide variety of activities in the physical education curriculum, the accompanying of physical activity with a joyous play spirit, a classification of individuals according to their physical fitness to engage in activity, the control of emotions and play situations for the development of approved character habits, the giving of health information to our students, and lastly the training in administrative ability necessary to organize and administer these many things. How accurately at that time he stated the physical education program and problems of today! And in concluding this address, Mr. Foss made one point which I know must have appealed greatly to my predecessor, Dr. McCurdy, namely, that all progressive

physical education teachers should belong to the American Physical Education Association and subscribe to the *American Physical Education Review*.

AS WE look over some of the points emphasized by Mr. Foss, we find ourselves discussing the "High Spots of American Physical Education." If there is any one thing that features the physical education program of today, it is a wide variety of activities. Marching tactics, calisthenics, rhythmic movements, apparatus work, athletic contests, team games, swimming and life-saving, mass games, and creative sports—all these we see properly adjusted to the modern physical education program. All these further provide the means to reach the wide range of individual differences of interest that are found in every gymnasium class. There is no longer any need of a quarrel between "formal" and "informal." No activity need be formal, if it can be invested with meaning and related to a purpose in life. Marching can be informal if the students taking part see that the mass precision and exactitude are necessary to the accomplishment of a demonstration drill which the school and whole community will enjoy seeing. Calisthenics can be informal when the students see that these movements have value in limbering up for more strenuous exercises to come, or even more so have value in perfecting skills which they can use in their games and sports. Apparatus can be informal to those students who enjoy competition in stunts and the conscious mastery of bodily control in movement. Under the new interpretation an activity is formal only insofar as it is devoid of meaning and performed as an isolated skill.

The old feud between formal and informal disappeared when it began to be realized that no one type of activity without the other should comprise the entire program and be imposed upon all students alike, regardless of their preferences and abilities to perform. Here we come to Mr. Foss' second point, namely, that all kinds of exercise should be accompanied with a joyous and exuberant play spirit. One thing essential to inculcating an activity with interest is to have the student realize that the activity is not an end in itself, but rather a means to an end that appeals to the performer. Another essential to play interest is that the performer must possess a certain amount of skill. More and more we are coming to realize that in our leisure time we tend to do the things we *do well*. The acquisition of skill is, therefore, an important foundation to the enjoyment of a certain physical recreation, for the play spirit is prompted by reasonable assurance of achievement and success. This accounts for the great variety of interests to be found in the gymnasium. Some activities have more or less universal appeal, but others, particularly the individual creative sports, have groups of followers largely according to the physical aptitudes and talents of the performers.

The matter of diagnosing physical conditions and needs of individ-

uals is probably the one factor in our present-day physical education that is attracting more attention than any other. Not only physical educators but general education and the public are vitally interested today in physical fitness and physical achievement tests. Remarkable progress is being made in the way of discovering the physical capacity of each student and then assigning activity or rest programs as the case may be to best fit his individual needs. With the help of these tests, the amount and kind of exercise can be fitted to each individual case, and the program thereby be made truly educational. In keeping with the importance of this phase of physical education, it is fortunate that our profession has such a splendid corps of research workers available. In Dr. F. R. Rogers, Dr. Brace, Dr. McCloy, Dr. McCurdy, Dr. Schneider, Dr. Tuttle, Dr. Steinhaus, Dr. Bovard, and Professors Cozens and Neilson, we have in physical education a talent of leadership that is second to none in any field of education or science, and their contributions are already being wholesomely applied in many city and state programs. It is significant that the state of New York has only recently passed a mandate that no teacher of physical education can be given a certificate of permanent tenure unless he has had a course in tests and measurement in his professional preparation. Graduate courses over the entire country are rapidly being introduced to meet the demands of teachers in service for information on this particular problem.

Next we come to play situations for the development of approved character habits. This viewpoint of Mr. Foss is exactly in accord with the generally accepted approach to character education today, namely, the *indirect* approach. While precept and preaching still have their followers, the place of the physical education teacher seems clearly to be that of providing wholesome situations in which the right kind of habits can grow and in which leadership and followership can both be exercised to the right degree. In some ways, however, character has become the weakest of our objectives. Today, the mores and standards are so disturbed that confidence in many of the older virtues is shaken, with, however, no new virtues as yet in which society has more faith. I notice frequently the word "personality" favored where the word "character" would formerly have been used, and I am wondering if there is special significance to the fact that the theme of this institute is "Physical Education and Personality Development." Does this more prevalent use of the term "personality" imply an attempt to dissociate morality from its former place in character education and to emphasize instead the shaping of habits and attitudes that are adjustable to meet one's problems and best interpret them in the light of the consequences to oneself and society?

In forecasting a new emphasis on health information in 1919, Mr. Foss anticipated the new health education movement which led to the formation of the American Child Health Association in 1923 and the

calling of the White House Conference on Child Health and Protection in 1930. This new emphasis, as you all know, grew so strong that many cities changed the name of their physical education departments to "Health Education." As a compromise, many state and city departments combined the titles Health and Physical Education in order to give due recognition to the importance of diet, rest, relaxation, and health habits in addition to the program of exercise.

When we consider the next point, namely that the physical educator must have the ability to organize and administer all the work of which we have spoken, then we realize the truth of this important assertion made by Mr. Foss. We have mentioned that the term Health and Physical Education was made as an administrative compromise. And now, with the formidable leisure-time problem that is confronting us, another responsibility is being entrusted to the physical educator more than ever before—that of community recreation. Those of you who have been in "Y" work have already known this responsibility rather intimately, but the school physical educator, until recently, has been mainly concerned with children of school age. Now, with school facilities available, with adult education so popular, and with an increased need for a program of unemployed youth, all the forces of the community are necessarily being mobilized in this new call to service. With the inclusion of older people in the recreational program, there is likewise a demand for activities of milder physical nature than the school physical education teacher has been accustomed to promoting. The new emphasis on community-wide recreation also demands the inclusion in the program of many activities of creative nature. An emphasis has come in music, dramatics, and the arts and crafts. The playground and camping programs have greatly expanded to include these interests.

It is because the physical education people have been willing to accept this new responsibility that a number of state and city departments have enlarged their administrative title to read, "Health, Physical Education, and Recreation." The fact that the physical educator usually possesses administrative ability and has also had recreational courses included in his training makes it natural that the community should look upon him as the recreational expert of the school and in many places of the community at large. It is a sound viewpoint, when one considers that the well trained physical and recreation leader has a perspective of the whole field that the art, music, or dramatic teacher does not. This past summer, I visited a playground system in a large city where the physical education director was in charge. Some important championship games were going on at that time, but did he take me to them? No! Instead, his first pride and joy was a little outdoor theater nestling in the hills for which he had begun the promotion work that had eventually interested the public. There we saw "Midsummer Night's Dream" played by the children of the neighborhood. I know of other cases where physical edu-

cation leaders have assumed an important place in organizing the various forms of recreational activity and acting as a coordinator in regard to the various relationships between them. Three things are essential to assuming this added responsibility successfully—an adequate training, a broad viewpoint, and the time to handle the work.

I HAVE completed the list of things which were mentioned by Mr. Foss in a similar assignment fifteen years ago. And now I will go on to hint briefly at some of the newer problems that have appeared on the physical education horizon since that time.

For one thing there is a strong tendency to integrate physical education with life and with other subjects of the school curriculum. The latter is particularly true in the elementary school. The English department, for example, in holding a pageant of colonial days, calls upon the physical education department to provide the dances that were a part of the life of the times. From the manual training department come the stage properties; from the music department, the songs; from the history department, the costumes; etc.

Physical education in the school has definitely tied itself up with the summer camp movement and with the adult education movement. There is no doubting the tendency for education to become year-round and life-long. In this respect the "Y" has anticipated the schools for some time, but the need has now grown to the point where all the recreational agencies of the community must be utilized to make education a *continuous* process.

One quite noticeable tendency is to introduce more academic content into the physical education curriculum. The participants enjoy having a knowledge of the background, rules, techniques, and strategy of the various activities. A number of colleges and universities are now requiring examinations on these points in their required courses, whereas previously the students had only to participate in exercise. Other schools are even going further and are holding open forums occasionally to which the public is invited. Basketball and football demonstrations of this nature have been held in which the different styles of play, the important rules, etc., have been discussed. The same is true of volleyball, swimming, fencing, etc. The interest on the part of the older generation in these explanatory demonstrations shows an obvious lack in their own education, and certainly speaks for a need of such instruction for the students at present in school. It is for this purpose, therefore, that many physical education courses are including this information or "appreciation" content.

There are so many important happenings taking place in physical education today that we can merely hint at some of them. In athletics we are gradually building up a united front against interscholastic athletics for women and against interscholastic athletics for boys of junior high

school age. We are modifying many of our former opinions concerning posture in order to take account of constitutional types. We are giving far more attention to the mental hygiene aspects of physical education and are realizing that the dub in our class needs self-expression as much as the expert. We are producing research—and good research—in surprising quantities as physical educators grow more insistent in finding scientific evidence to help them with their problems. We are beautifying our buildings so that they no longer look like barns and our play spaces so that they no longer look like empty lots. We are liberalizing our physical education requirements to allow more leeway for individual selection in regard to program and time. We are utilizing student leaders as never before, and bringing out the rich potentialities of our program in training for responsibility. We are emphasizing relaxation as well as activity as part of physical education knowledge. We have popularized many new recreative sports and have made a very interesting start in the encouragement of corecreational activities in which boys and girls can play together in wholesome fun. We have interested the girls more in team sports and the boys in vigorous forms of the dance. From the standpoint of the women's program, we have witnessed many advancements to bring out the creative possibilities of the dance. We have promoted "Hobby Days" in communities and also "Hobby Hours" in schools in which the students may engage in activities of their choosing. We have accepted new responsibilities in regard to safety education, education for leisure, social behavior, guidance, and health counselorship. We have made progress toward standardizing our programs so that they are not left completely to chance or to the individual whim of the instructor. We have provided for sequence of material so that the individual may progress in his work in the same way that he advances to more difficult material in history or science. These and many more developments are all taking place in addition to the previous ones that we have discussed more fully.

IN CONCLUSION, may I state that I consider this meeting to be a notable high spot in American physical education. It has brought together many prominent leaders to discuss pertinent problems in our field. Not only will those assembled here gain inspiration and guidance from the meetings they are attending but they will carry away with them these messages to wider circles. The sponsors of this Institute have, therefore, made a splendid contribution to the progress of physical education.

As I close, I wish to congratulate Mr. Foss upon the honor being bestowed upon him, also to express appreciation for the contributions he has made to physical education, and, above all, to wish him continued health and happiness.

The Professional Equipment of the Modern Physical Educator

By HEDLEY S. DIMOCK, PH.D.
Dean, George Williams College, Chicago

IN FACING the prospect of this talk I found myself somewhat in a dilemma. Does the heavy-sounding topic "The Professional Equipment of the Modern Physical Educator" call for a description in impressive academic language of the subject matter and skills that ought to enter into the professional training of the physical educator? Or, would the topic be more adequately dealt with by describing in simple and concrete fashion what the physical educator does, or might do, from the standpoint of personality outcomes in participants, indicating more indirectly what equipment in insights, knowledge, and skills is essential for this purpose? The first procedure undoubtedly is the one you would expect me to follow, and it would be simple. The curriculum outlined would undoubtedly appear strikingly similar to that for the training of physical educators as described in the catalogue of this college! But I am going to take the more difficult course, namely, that of describing simply what a physical educator does if he is effective in the realm of personality and character development.

SHIFT IN THE CENTER OF GRAVITY NEEDED

Before beginning this description may I call your attention to an assumption which I believe would be fairly well accepted in this group? Physical education is in the same boat as all education in its tendency to make the means of education become the ends or objectives. Subjects or activities, theoretically, are means to the development of persons; that is their only reason for being included in a curriculum or program. Due to factors which we can understand historically, however, in almost every institution the person has been lost sight of by a preoccupation with activities or subjects. We find the church teaching the Bible or theology instead of developing desirable attitudes and habits in persons. We find the school teaching subjects, again with the attitudes and conduct of children largely ignored and with disastrous results to the person and to society. We find the Young Men's Christian Association and other recreational agencies promoting activities, with the object and the belief that in some way, more or less dimly perceived, these activities will produce desirable results in the participants.

We stand now, as the result of many influences which have been working upon us, at a place where we are attempting to recover the per-

son as the center of educational gravity. This obviously demands that we shall know more about the persons whom we are trying to develop than we do about the means. Or, if you object to the "more than," you would at least agree that we must know as much about the person who is the object of our education as we know about the subject or the activity which is supposed to be the means.

THE PHYSICAL EDUCATOR AND PERSONALITY OUTCOMES

Let us assume that the physical educator is fairly effective in achieving the development of physical skills in persons through his program. Can we also assume that he would like to be as effective in securing personality outcomes in the persons who participate in the program? The major concern of this Institute is with the latter set of objectives in physical education. What, then, does a physical educator do and what does he need to know to be more effective in securing personality and character outcomes? A comparison of what he does from the standpoint of achieving physical skills with what he does, or should do, to achieve personality or character changes may help to make this discussion concrete and pointed.

CLEAR AND SPECIFIC OBJECTIVES

The skilled coach or instructor in physical activities has clear-cut and specific skill objectives for his activities. The basketball coach, for example, knows definitely what skills or habits enter into effective basketball playing. A good player must be able to pass fast and accurately, to pivot, to dribble, to shoot, to guard, to enter into team formations, etc. The coach would not expect the right skills or habits to be developed in some miraculous fashion if he did not know what specific skills made up the elements of effective basketball playing.

The skilled physical educator should also have specific and clear-cut objectives in the field of personality and character. If he does not possess clear and definite objectives, he should not expect desired habits and attitudes which he has vaguely in mind, if at all, to be developed. Even when he does have clear and specific objectives it is difficult enough to attain them. This is not the time to attempt to say what these specific objectives in the field of character and personality development are. We do know some things which are essential for effective social living in the modern world. We would probably all accept, for example, that persons should make an intelligent approach to the solution of problems, that they should be cooperative in their relationships with others, that they should be concerned for the welfare of others, that they should be tolerant and open-minded, and that they should be willing to carry social responsibility. The major point to be emphasized is that we must know what these objectives are specifically, as we know what the objectives or desired skills are for effective basketball. We dare not leave personality outcomes in the realm of the nebulous.

PERSONALITY OBJECTIVES MUST BE INDIVIDUALIZED

Our skillful basketball coach possesses a clear idea of the specific skills which make up effective basketball playing but he also understands the *individual* differences and needs of his participants or players. Where necessary he uses tests and other forms of measurement to discover these individual needs and differences with greater accuracy or refinement. He knows that one man especially needs improvement in dribbling or in passing, another one in shooting, or in defensive work, another one in stamina.

Similarly, if the physical educator is to be effective in the field of personality development, he must have insights and techniques for understanding the individual personality needs and differences of the persons with whom he is working. There is a great gap between our ability to individualize our objectives for the development of skills and our ability to set up objectives on the basis of personality needs and objectives. Sometimes we deal with classes or groups so large that we do not even know the names of the participants. How, then, can we individualize our objectives for them?

Yet we know that persons differ more in attitudes and in conduct than they do in physical abilities. Persons differ greatly not merely in their interests but also: in the degree of confidence they have in themselves; in the amount of poise they possess; in their ability to cooperate, to carry responsibility, to make wise decisions in the light of consequences, or to respond to the needs and welfare of other persons. Persons also differ greatly in their effectiveness in dealing with the problems of work, of health, of marriage, of maintaining adequate home relations. Without knowing something of the background and the social setting of the life of a person it is difficult to utilize physical activities as a means of personality development. This is an inescapable requisite of physical education if we are to utilize our opportunity for personality and social growth.

**THE CONDITIONS OF PERSONALITY DEVELOPMENT
MUST BE UNDERSTOOD**

Our effective basketball coach understands the conditions under which the desirable physical skills and habits are learned. He knows that the player learns to "shoot" fast and accurately by practice which is constantly modified or improved under the stimulus of an idea. He provides this opportunity for experience or practice under carefully directed "laboratory" conditions. He does not depend upon chance or "atmosphere" for the development of skills which require frequent, long, and satisfying practice.

When we examine, however, our efforts for securing personality outcomes through physical activities would we not have to admit that we have leaned rather heavily on chance or "atmosphere" to bring about the desirable attitudes and habits? Sometimes we have even naively assumed

that because the activity takes place in a certain building—a church, a school, or a Y.M.C.A.—that the personal attitudes and habits developed will be in line with desirable character. The phrase “character is caught” has somehow or other suggested that since it cannot be “taught” it must be left to chance. We now know there are very definite conditions under which desirable personality and character growth is most likely to take place. It is not my task here tonight to suggest with any degree of completeness what these conditions are. Some of the essential knowledge of these conditions comes from the field which we label educational psychology, some from the field of mental hygiene, other from the field of social psychology and sociology, and other from the field of general education. Let us illustrate from each of these fields one or two of the conditions affecting the development of social habits and attitudes.

From the resources of *educational psychology* we have received a term, “concomitant learnings,” which, upon analysis, tells us a great deal about the conditions of personality development through physical activities. The concept of concomitant learnings suggests, in the first place, that when a person is engaged in some physical activity in addition to the physical skills which he is acquiring he is developing many social attitudes and habits. More important, however, than the fact that the concomitant learnings are the important ones from the standpoint of personality development and therefore must be understood is the second fact, that these attitude and habit learnings may be either positive or negative, desirable or undesirable. The person is as likely to develop a sense of irresponsibility as of responsibility, to become uncooperative as to become cooperative, to be more selfish rather than less selfish, to play to the gallery rather than to be modest, to become egocentric and conceited rather than to be humble and social. If the desirable attitudes and habits are to be developed we must understand the conditions under which these, rather than the negative learnings, result and provide these conditions through our directions, just as we provide the conditions for improvement in skill by providing the situations under which improvement takes place.

From the field of *mental hygiene* we secure rich insights and resources for personality development through physical activities. We learn much about the personality differences of individuals and about the motive behind different kinds of behavior. We see the various basic urges which are being thwarted or satisfied in physical activities and group experiences. We see the conditions under which personality is made to feel more insecure, more deflated, and more inferior. We discover, too, the kinds of experiences which are most likely to contribute to the basic needs of persons, so that where we have been helping one person before we may now help three, or where we have been damaging five before we shall now damage only one or two. We had a striking illustration presented last night in the Section on Supervision, of a young man who became a

highly competent boxer. It was only later, however, that sufficient insight of this man's personality and social background made apparent the fact that the excessive interest in boxing was really an escape from dealing realistically with a central problem of life. The more social approval which the individual got through his success in boxing the more he ignored a problem in his home and vocational life the solution of which for him should have been the most important and crucial thing in the world.

In an adolescent study which has been made here at the College we have discovered that persons who are superior in physical factors have an additional problem of social adjustment as compared with those who are average. Deviation from the average, then, whether this deviation is below or above, produces personality differences which should be understood by physical educators if they would be effective in achieving wholesome personality and growth.

A striking example of the value of resources from *social psychology* for physical educators came from the studies of Hartshorne and May. They have discovered that attitudes and habits are not merely individual things but are tied up with the group life of the individual. If we want to affect attitudes and habits, therefore, we must work through those groups in which the individual most lives, and moves, and has his being.

We have discovered, also, in our Adolescent Study that the larger the group, or class, in social and recreational agencies, the less adjusted in it is the individual, the less the participation, and the more rapid the turnover of membership.

From the resources of *sociology* physical educators learn that the patterns of conduct and behavior of persons are rooted in the mores of the community. The forces which make and mar the individual are usually outside of the immediate control of the institutions in which we work. We must be concerned, however, about these powerful community forces unless we are willing to have our function as physical educators chiefly that of giving a sort of an "emotional massage" to personalities which are twisted and thwarted by forces in the community which make for insecurity, discouragement, and the belittling of self-esteem.

From the field which we term *education* we get insights as to how programs may be built in such ways that personality objectives result. If we are attempting to develop persons who will be resourceful and independent, who will have the ability to attack problems in a cooperative fashion, who will have a sense of social responsibility, then we must develop programs which will provide the opportunity for practice in these complex habits. More important than content of program will be its method, because the development of such qualities as these is not a matter of what is done so much as it is of how it is done. If we ascertain who makes the decisions in or around our program that will tell us who is receiving the learning. If we ask who carries the responsibilities and

makes the plans, we know who is receiving the learning. If this person be the physical educator, then he is the one who is profiting most from the experience. There is no other way under heaven by which an individual can learn to make wise decisions, to cooperate effectively, to carry responsibility, to act in ways that express social concern than to have the actual experience in all these things.

HOW IMPROVE OUR PROFESSIONAL EQUIPMENT FOR THIS PURPOSE?

A new sense of need of higher professional standards of competence is pervading most groups today in the social and educational fields. The task is so enormous and the potential opportunities so gigantic that we must increase our professional competence. In looking at our opportunity in the field of personality development through physical activities some of us may hesitate to enter a realm where we do not feel at home. Others will see here an expansion of opportunity of the utmost significance, which promises us new and richer satisfactions. Let me make the sporting proposal that we attempt to match our understanding of how to develop physical skills and health habits in persons with our understanding and skill in the development of personality. What are some of the ways we may take to increase our competence in this direction?

The best line of improvement in professional competence, of course, is *actual experience*. We should "keep our eye on the ball," which in this case is the person, and what is happening to him. But casual experience is not enough. It may be superficial; it may lead to undesirable practice. Our actual experience, therefore, must come under systematic and constant criticism in the light of the best we know or can discover. I would recommend that anyone who has not yet made a thorough case study of an individual should make one not merely for what it will tell him about this one person but for the deeper insight he will get about persons and the factors which enter into their development.

We may *relate ourselves to other professional workers* dealing with persons in our community, such as teachers, social workers, vocational guidance specialists, juvenile court judges or workers. Different relationships with these persons through meetings and more informal contacts will help us in our attempt to make persons the center of educational gravity and to secure insights which will make us more resourceful in helping persons to live more effectively in this topsy turvy world.

Reading, I hope, is still a respectable method of increasing one's professional competence. Resources bearing upon personality development from the mental hygienists, the psychiatrists, the child guidance clinics have poured from the press during the last decade. These have been written for us if we want to understand personality development.

Our professional competence in the development of personality through physical activities will be increased by *using resources in our*

own community, resources represented by the psychiatrists, visiting teachers, child guidance clinics. Our staff meetings may draw upon such resources or we may utilize them in more informal ways. We are not alone in our interest in personalities nor can we expect to do an effective job without working in close relationship with the persons and agencies with similar interests in the community.

Many of us have, or can make opportunities to bring our previous professional education up to date by *taking college courses* in residence or through correspondence.

One of the largest opportunities for the improvement of professional competence in this direction is the *staff meeting*. Many staff meetings in the school, the Y.M.C.A., and other agencies devote much of their time to matters of routine and administrative problems. It would lift some of these meetings from the monotony of discussing routine affairs to use them for consideration of the real purposes for which the agency exists and of how the conditions may be provided for these purposes to be actualized. The staff meeting could be made a systematic and highly significant factor in the enrichment of our professional equipment from the standpoint of securing these personality outcomes in participants, students, or members.

But, you say, we can't be generalists; our specialty is physical education. The real question is: In what realm should our real expertness lie? Unless I am mistaken, for the persons in this room tonight the real expertness we seek is in the realm of personality and character development. It is our concern for this objective that has brought us into this type of work. It is true that we may have assumed that the central objectives were accomplished more or less automatically and inevitably as the by-products of activity. But we are not going to change our major interest in the development of persons simply because we now know that the best results can come only when we master the knowledge, the insights, the understandings, and the skills which we need from the standpoint of securing personality outcomes.

Physical educators and recreational workers stand on the threshold of a new frontier, beyond which lie rich resources for personality and social education. There is no single door or gateway into this new El Dorado. Ours is the opportunity to know the thrill and the adventure of pushing forward into this new frontier by the same methods of hard work by which all advances are made in any profession.

Pathways to Personality

A Pageant Portraying the Ultimate Aim of Physical Education

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THE THEME

THE PAGEANT "Pathways to Personality" portrays through story, symbolism, and action the ultimate aim of physical education. In the prologue we see portrayed a typical youth facing the problem of his future profession. Through the episodes are presented types of activities which may aid in the development of wholesome personality. In the epilogue the student is shown accepting the challenge of physical education, in which he envisions all of those elements which under right leadership may lead to inspiring fineness of personality. He recognizes that the activities of physical education may become true "Pathways to Personality."

Prologue. "The Vision"

Student, Wisdom, Law, Medicine, Art, Literature, Music, Ministry, Physical Education.

(Illustrated in Figure 1 on cover)

Episode One. "The Spirit of Physical Education"

Physical Education is surrounded by figures representing the various elements in all-round physical development: Beauty, Rhythm, Grace, Agility, Skill, Strength. (Figure 2.)

Episode Two. "The Spirit of Health"

Air, Sun, and Water, forces of nature which contribute to Health are shown.

(Figure 3.)

Interlude—The dances of Air, Sun and Water.

Episode Three. "Individual Stunt Type Activity"

Tableau—(Figure 4)

Gymnastics, Tumbling, Track and Field Athletics.

Episode Four. "Aquatic Type Activity"

Tableau—(Figure 5)

Swimming, Diving, and Life Saving.

Episode Five. "Combative Type Activity"

Tableau—(Figure 6)

Boxing, Wrestling, and Fencing.

Episode Six. "Games and Sports Type Activity"
Tableau—(Figure 7)

Individual games and sports: Archery, Golf, Badminton, Tennis.

Mass games and relays: Line relays and circle games.

Team games: Basketball.

Episode Seven. "Rhythmic Type Activity"

Tableau: Goddess of Liberty.

Indian Clubs, Sir Roger de Coverley Dance, Tap Dancing, Polish Dance.

Epilogue "The Realization"
Grand Finale Tableau.

CHARACTERS

Narrator.—A man with a good speaking voice.

Student.—A young man college age, good physique; dressed in business suit in prologue and in a track suit for epilogue.

Wisdom.—Young woman with pronounced features, large of stature. Wears a high type of head dress, Egyptian style. Gold and purple draped robe. Holds large quill pen; has a scroll across knees.

Law.—Dignified young man wears academic cap and gown, carries typical law book.

Medicine.—Professional type of young man, dresses in doctor's hospital uniform.

Art.—Artist type of young man, wears smock, beret, black bow tie; carries palette and brush.

Literature.—Young woman wears pale yellow Grecian robe and sandals, carries half-open scroll.

Music.—Young woman wears pale green Grecian robe, sandals. Carries music symbol.

Ministry.—Young man, well poised, wears minister's robe, carries an open Bible.

Physical Education.—Young man of fine physique, wears white duck trousers and sleeveless gymnasium shirt, and white gymnasium shoes.

Beauty.—Young and graceful girl wears pink Grecian robe, carries a pink rose.

Rhythm.—Graceful young girl wears silk dancing costume.

Grace.—Graceful young woman in artistically draped picturesque costume.

Skill.—Athletic type of young woman in picturesque sports costume, carries archery bow.

Agility.—Young man, athletic type, wears track suit, carries vaulting pole.

Strength.—Young man, muscular type, wears trunks.

Spirit of Health.—Attractive, healthy type of young woman, wears colorful rose georgette robe, gracefully draped. Silver band on head.

Air, Sun, Water.—Young women of aesthetic dance type: Air wears filmy silk dance costume of pale blue clouded in grey. Sun wears filmy silk dance costume of varying gold shades. Water wears filmy silk dance costume of blue green, blending into paler shades of same colors.

Sports Tableau Personnel.—Five athletic type young men dressed in swimming straps with bodies whitened. Reproduce classic type of statuary.

Goddess of Liberty.—A striking young woman, wears all white Goddess costume. Drape banded with gold braid. Holds aloft gold torch and in left hand a gold book.

International Dance Groups.—Wear native dress.

THE SCENE

The stage (sixteen by thirty feet) is set with very dark blue or black cyclorama or screens. A stage curtain is very necessary and is opened and closed on each episode and tableau. The demonstration area about thirty by sixty feet is in front of the stage. The seating arrangements for spectators are around the demonstration area and facing the stage.

PROPERTIES

Study table, chair, and lamp with magazines and college catalogues for student. The table is down stage right. This is used only in prologue. A small platform about eighteen inches high for Wisdom's chair. The effective ornamentation for this chair is a large fan shaped back (gilded) and large arm rests (gilded). A small platform about eighteen inches high for Goddess of Liberty to stand on in finale. Six stools or boxes eighteen inches high placed in semi-circle rear stage in finale, for Law, Medicine, Art, Literature, Music, Ministry to stand on. Cover stools with same colored drape as Goddess of Liberty platform. A fan-shaped arrangement of international flags should be in the background for the seventh episode but is removed for the finale. In episode four the pedestals for the aquatic tableau should be covered with drape that matches the background. The narrator stands at stage left front—floor level—though his chair and rack for reading light and script are on elevated platform. The piano is placed in a corresponding position stage right. These locations allow a run-way between them and the stage for the groups to enter who will demonstrate the various types of activity. These groups enter from the rear and around the sides of the stage. The apparatus used for the demonstrations should be placed as quickly and quietly as possible because the narrator is reading during this proceeding.

Time for performance one hour and forty-five minutes. Five minutes time was allowed for the demonstrations in the various episode. The demonstrations appeared as follows:

Gymnastics and Tumbling	five minutes	Team Games	five minutes
Track and Field Athletics	five minutes	Indian Clubs	five minutes
Swimming, Diving, Life Saving	five minutes	Sir Roger De Coverley	
Boxing, Wrestling, Fencing	five minutes	Dance	five minutes
Individual Games:	five minutes	Tap Dance	five minutes
Mass Games	five minutes	Polish Dance	five minutes

THE NARRATOR

In introducing this pageant, "Pathways to Personality," we wish to suggest a few of the types of personality requirements which are necessary for effective living in the modern world. Integrated personality is characterized by the following:

1. Appreciation of, and concern for, human values;
2. Ability to foresee consequences of action in terms of their effect upon all the persons involved;
3. Ability to select adequate means to attain worthy goals;
4. Ability to evaluate the results of action;
5. Ability to cooperate with others in pursuing socially significant ends—this involves tolerance, understanding, open mindedness, and cooperative ability.

Next we suggest something regarding the process or method which is

required if these outcomes in personality and character are to be achieved—in addition to motor skills, coordinations which we shall assume are acquired directly. Three factors only are suggested, as examples. There must be:

1. An understanding of individual interests and needs as a basis for program planning;
2. Recognition of vital groupings of persons if learnings are to be reinforced by group approvals and disapprovals, rather than be regulated artificially by coercive leadership;
3. Opportunity for creative participation in purposing, planning, executing, and judging the activity involved.

Clearly, physical education carries social implications. Through appropriate individual and group activities, such as games, sports, aquatics, combatives, gymnastics, and rhythms, when practiced under favorable conditions, the participant more readily and naturally acquires habits of obedience, self-sacrifice, cooperation, friendliness, loyalty, capacity for leadership, ability to lose without sulking and to win without boasting, a spirit of fair play and all that is implied in the word "sportsmanship."

The activities of physical education when properly directed and supervised contribute to physical and mental health, to good citizenship, to worthy use of leisure, and to ethical character; they may be, literally speaking, *Pathways to Personality*. But this is true only when the focus is upon the person in his group relationship and not upon the activity itself. The activity is merely a vehicle or tool. Physical education produces desirable personality outcomes only to the degree that the physical educator, or other leader, considers the whole person and introduces an educational process which places vital groupings, vital interests, and vital cooperative participation at the heart of the experience.

Many of the activities of physical education are self-testing and they exercise those deeper tendencies which drive to a mastery of the big-muscle motor mechanisms of the body. The hundreds of chasing—fleeing—tag games are all dramatizations of situations in the social relationships of children which exercise old racial activities.

Many of the activities of physical education are big-muscle, social-fighting plays. These involve relationships between two or more individuals, and these relationships are centered in contests which exercise these tendencies. In the contest, egoistic feelings are at stake, which is indicated by the anticipation of the outcome of the contest and by final elation or depression. Thus physical education activities exercise deep, powerful, social, fighting, and egoistic tendencies, and through such activity character traits, desirable or undesirable, are developed. Thus seen, the development of character is inherent in the social situation of which the activity is a part. The quality of the character outcome is

determined by the interactions between the persons involved.

The essential point here is that in physical activity growing human tendencies are being exercised, and the exercise of them may be at either end of or at any stage between the extremes of *inspiring fineness* and *utter viciousness*.

The expressions of character may be good or bad, hence the development tends to be good or bad according to the quality of leadership employed. The leader and the group set the standards. In few other fields of activity does adult leadership have greater potential moral power. Character training, then, is seen to be the developmental objective of physical education. Not the development of skills alone, not the achievement of knowledge, but the creation of habits, attitudes, and appreciations that are required for effective living are the goals toward which physical education is directed. Thus may physical education activities become true "Pathways to Personality."

PROLOGUE

"The Vision"

In the prologue of our pageant we see portrayed a typical youth facing the problem of his future profession. He has before him several college catalogues and as he thumbs the pages he *visions* the possibilities of a variety of professions. Guided by *Wisdom* he attempts to make his decision. First comes *Law*, one of the oldest and most honored of the professions; then follows *Medicine*, with its great humanitarian appeal; next we see *Art*, with its great possibilities for creative leadership; following *Art* comes *Literature* and *Music*, two of the fundamental expressions of man's innermost feelings and desires. He then visions *Ministry*, with its universal appeal to the spiritual nature of mankind. All of these have interested the student and have had full consideration but he is not yet certain of his choice, until he discovers *Physical Education*. The student is immediately challenged by all that is implied in the words *Physical Education* and he therefore seeks *Wisdom* regarding the constituent elements of *Physical Education*, and *Wisdom* attempts to point out some of the fundamental characteristics of this new profession.

EPISODE I

"The Spirit of Physical Education"

In Episode One the *Spirit of Physical Education* is seen surrounded by figures representing some of the elements in all-round development. At the left of the stage we see *Agility*, portrayed by the pole-vaulter; and next on the left we find *Rhythm* and *Grace*. On the right is *Skill*, portrayed by the archer who has just released the arrow and is about to retrieve it from the gold of the target. *Beauty* at center right personifies this element completely. Finally the student sees *Strength* in close proximity to *Physical Education*.

The elements which have been shown are more or less physical in nature and they represent some of the technical and associate acquisitions from programs of physical education. No attempt has been made to show all of the elements or to portray the essential developmental objective of physical education—*wholesome personality*—because it is a composite of these and many more.

EPISODE II

"The Spirit of Health"

One of the fundamental objectives and therefore one of the important by-products of a well planned program of physical education is *Health*. Physical education believes one of the results of its program of big-muscle activities is the improved functioning of the organs of nutrition and elimination; in a word, nutritive power is developed. Synonymous with organic power are vitality, vigor, capacity to assimilate food and to expend great energy in work or in play, with a slow onset of fatigue, or with rapid recuperation. These powers indicate a development of the circulatory, respiratory, digestive, and the heat-regulative mechanisms of the body. To a great extent, the development of these general organic powers, latent within the hereditary possibilities of the organism, depends upon vigorous activity.

Physical education recognizes that it is only one of the many forces which may, under proper conditions, enhance the physical and mental health of persons.

In Episode Two we see the *Spirit of Health* personified, and surrounding *Health* are the three great forces of nature which contribute to the attainment and maintenance of good health, *Air*, *Sun*, and *Water*. Physical education utilizes these forces and urges that its program be primarily out-of-doors, where these forces are most powerful and effective.

EPISODE III

Stunt Type Activity

The *Spirit of Physical Education* now presents to the student demonstrations of several types of activities which groups of persons of like interests are utilizing for a great variety of purposes, such as physical recreation, physical relaxation, physical and mental health, and physical development.

Physical education is casting off its old ideas of fitting persons to programs and instead is fitting programs to meet the needs and interests of persons. In a word, it is becoming person-centered. It is in these group relationships that physical education has its greatest contribution to make in *personality development*. It is doubtful whether one could find a more powerful factor than the approval and disapproval of the persons and groups with which the individual has the most intimate relationships. It can almost be assumed that when groupings of persons

are on the basis of common interests, the relationships, if not intimate or close at the start, may quickly become so under skillful leadership. It is at this point that physical education has its great opportunity.

In the Third Episode are presented activities of the *stunt type*, in which the participant manipulates or propels himself or an object which for a time may be considered a part of him. Gymnastics and track and field athletics are being demonstrated as typical of this type of activity. One only needs to watch the performers for a moment to recognize that fundamentally these activities are old in human phylogenetic history. The participant will be seen to be hanging, climbing, mounting, vaulting, swinging by the arms and legs, pushing, pulling, running, jumping over barriers, all of which are exercising many of man's innate tendencies.

Such activities, when conducted under proper conditions, may contribute to the development of better individualistic qualities, such as courage, self-confidence, accuracy of judgment, determination, aggressiveness, and many other desirable habits and attitudes. Whether they do develop is determined by the ability of the leader to recognize such possibilities in the activity and to utilize methods which are educationally sound and psychologically correct.

EPISODE IV

Aquatic Type Activity

In the fourth episode man's ability to adapt himself to a type of activity which is unnatural to him is shown. If one were to consider swimming from the standpoint of anatomy and physiology, one would doubtless agree that in our present state of evolution man is adapted to living on land. Medical men suggest that when persons have wide-open nasal passages, straight septums, and normal turbinates, they should be allowed the privilege of swimming, if they are interested; but that when the individual has distorted nasal passages, especially when accompanied by a history of sinus or ear disturbances, he should not be allowed in the water, even though keenly interested.

It might be said that the two great contributions of these activities are *safety* and *recreation*. We see in swimming and life-saving a fundamental human urge coming to life when men, women, boys and girls arduously prepare themselves to *care for others in the water*. The recreational possibilities of swimming and diving are limited only by sanitary facilities. The prominent place which *splash parties* are having in physical education programs today is a clear indication of the recreational values of this activity.

EPISODE V

Combative Type Activity

In Episode V, boxing, wrestling, and fencing, three of the so-called combative type of activities, are presented. Such activities are inher-

ently of the fighting type and because of this are not countenanced by some persons. On the other hand, such activities because of their nature, possess substantial possibilities for the development of specific habits, attitudes, and values. The important thing here is that the leader analyze the particular activity for possible learnings. By this procedure he will discover there are wide differences in the possibilities of such activities as swimming, volleyball, basketball, and combative activities for character training. In activities of the combative type the emphasis should doubtless be upon the defensive rather than upon the offensive elements of the sport. Safety, self-control, respect for others, may be definite learnings—*when leadership is of the highest type.*

EPISODE VI

Games and Sports-Type Activity

In Episode Six are presented three types of games and sports—*individual, team, and mass.* These are the great natural areas of physical education for the development of wholesome personalities because more young folks are interested in this type of activity than in any other type. The love of play is so strong in the child that he builds up habits and attitudes naturally and easily in the play situation. The fact that his whole interest is centered in this attractive activity renders the play situation a crucial element in education for character. In spontaneous action there is opportunity to develop aspects of personality that are to a great extent suppressed while the child is under the discipline of the classroom. Wholesome play furnishes a rich field for the development of character in the same manner that certain soil will grow the healthiest plants; and, similarly, as the plant which is cultivated by an experienced gardener will thrive better than the uncultivated one so the child will develop better under the influence of a sympathetic leader.

However, play of itself cannot be expected to develop right attitudes or right personality qualities; it merely furnishes the opportunity for their development. If undirected or under improper leadership the tendency may be in exactly the opposite direction. Play can just as easily teach dishonesty as it can teach honesty. *Always the standard of leadership must be kept at its highest.*

EPISODE VII

Rhythmic Type of Activity

Since the goal of physical education is the building of integrated personalities, the educator seeks to make good motion habitual, to help persons gain mastery of their bodies so that all tasks are undertaken and executed with an intelligent appreciation for an application of force and effort, and to develop them as far as possible within the limits for enjoyable and efficient activity. It may be that dancing and other rhythmic activities can aid in this development.

An integrated personality is one in which physical, mental, social, and emotional powers are developed equally, no one of the factors being built up at the expense of the others. Our emotions and desires need intelligent selection and guidance, and to be carried to their fullest expression they demand skillful execution.

In the Seventh Episode are presented three types of rhythmic activities—Indian clubs, tap dancing, and folk dancing. In these activities the many positions of the arms and feet demand accuracy in controlling the direction of single movements, and a highly developed degree of coordination in the complex movements. This coordination is developed gradually as the activity increases in difficulty. It gives the individual that consciousness of power expressed in graceful carriage, apparent in general bearing or poise. With the development of this subjective power of neuromuscular control the constant wave-like alterations of bodily positions are performed with correspondingly decreasing effort. They require a semi-automatic character. The various changes in posture follow upon a stimulus supplied by some guiding musical rhythm. This rhythm is the directing spirit and sways the individual much as fallen leaves are whirled about by an evening breeze.

This type of activity is rapidly becoming a universal and increasingly popular art form of expression. In all countries there is taking place a reawakening of the love for rhythmic movements. This type of activity is giving man a medium of artistic expression based upon a universal, age-old rhythm. In the final episode we are reminded of this appeal of rhythmic activities to all races and nationalities.

EPILOGUE

Thus have we seen the student guided by *Wisdom* as he chooses *Physical Education* from a long list of vocational opportunities; a profession to which he pledges himself wholeheartedly. Physical education challenges him above all others, because for him, it offers such possibilities for leadership in character development. In physical education he envisions all those elements which under right leadership and direction may lead to inspiring fineness of personality. We join with him in accepting the challenge to give right direction to physical education activities, right leadership, right supervision; making of these activities true *Pathways to Personality*.

NOTE: The writer of this narrative is indebted to Clark Hetherington, Elmer D. Mitchell, Charles H. McCloy, Hedley S. Dimock, Charles S. Hendry, Emil Rath, Frank S. Lloyd, and George G. Deaver for excerpts from their writings, which he has used.

Report of Institute Groups

INTRODUCTION

AT THREE distinct times during the course of the Institute the members met in groups determined on the basis of professional interest. Under direction of a chairman assisted by resource persons, these groups discussed the principles brought out by the platform addresses, evaluated current practices in the light of these principles, and developed suggestions for the extension or modification of present professional practices.

Here are presented a list of the cooperating resource persons and brief outline summaries prepared by the groups.

The following persons cooperated with the various group sessions in the capacity of Resource Persons:

Neva Boyd, Northwestern University, Evanston.

Olga Anderson Buhl, Y.W.C.A., Chicago.

Dr. Vernon DeYoung, George Williams College, Chicago.

Martin I. Foss, George Williams College, Chicago.

John Fuhrer, Y.M.C.A., Chicago.

Vera Gardiner, Board of Education, Chicago.

L. G. Kranz, Northwestern University, Evanston.

Louis Kulcinski, State Department of Education, Springfield.

E. L. Moore, Chicago Public Schools.

Mrs. Carmen McFarland, Y.W.C.A., Chicago.

Mary E. Murphy, Elizabeth McCormick Fund, Chicago.

Dan Penney, Chicago City Parks.

A. H. Pritzlaff, Board of Education, Chicago.

Dr. Dudley B. Reed, Billings Hospital, Chicago University.

Alexander Ropchan, Council of Social Agencies, Chicago.

Oscar C. Rose, Chicago City Parks.

Walter Roy, Chicago City Parks.

Dr. Karl P. Zerfoss, George Williams College, Chicago.

I. INSTITUTE GROUP—"GOOD COACHING METHODS"

WESLEY FOTSCH, *Chairman*

1. Discussion of eligibility rules in colleges brought out general agreement on maintaining the present rules, in accordance with which full scholastic load must be carried, at better than passing grade, although objections were raised to this standard.

2. It was recognized that the practical problems of meeting and handling large squads of candidates for teams frequently compelled coaches to dismiss quite peremptorily many who could not at once comply with eligibility requirements; and the danger of personality frustration was stressed.

3. Since coaches, within the present highly competitive system, must

give their major interest to plays and strategy, and thereby tend to neglect the significance of game participation to individual students, they must at least maintain the very best ethical practices in all relationships which are possible, so that the thoughtful observer may at least catch the spirit by indirection.

4. Favorable examples of coaching methods drawn from basketball were examined and briefly commented on.

II. INSTITUTE GROUP—"EFFECTIVE CLASS INSTRUCTION"

MELVIN A. CLEVETT, *Chairman*

1. Present methods of classifying individuals according to school grade or chronological age are inadequate for effective physical education. Any classification scheme must be sufficiently flexible to provide for vital groupings of persons if group approvals and disapprovals are to be used instead of coercive leadership.

2. Methods of conducting classes so as best to achieve desirable character outcomes from the activity must focus attention upon the persons in the activity rather than upon the activity itself.

3. Sensitivity of the instructor to the possibilities of the various activities for personality development is dependent to a large degree upon a careful analysis of the activity itself, and the relationship of the educatee and educator in the total situation. Such activity analyses, when utilized, indicate that some activities are more satisfying than others, therefore are potentially more powerful for personality development.

4. When classes are organized according to school grade or chronological age the instructor should select and train high grade leaders who may supplement his efforts. He then becomes an instructor of instructors and assumes a supervisory relationship. The success of the volunteer leader is not primarily related to his performing skill in the activities of physical education.

5. Sample physical education class programs from Y.M.C.A.'s, social settlements, playgrounds, schools, and colleges were reported. The purpose was to ascertain the extent to which the criteria of effective physical education for personality development, suggested by Frank S. Lloyd, had been used. There was evidence of weakness in the following areas:

a) No clear understanding of the situation and the activity and their relative values. Too little consideration seemed to be given to the relationships in the total situation, which includes the educatee, educator, and the activity.

b) The programs were not developed on the basis of long-term interests of the individuals in the class. Some of the reports showed evidence that the programs were not based on immediate interests of the participants but were merely traditional.

c) Too little evidence of active creative participation in purposing,

planning, and executing the program by the members of the classes. Thus too infrequently the class situation did not allow the members to make decisions and assume responsibility for them.

d) Only rarely did the instructor relate himself to the members of his class as a friend, guide, counsellor.

e) Practically nothing was reported regarding the evaluation procedures being used to test the effectiveness of the physical education program for personality development. The classification of persons for competition, according to the results of skills tests was reported once. Likewise one report was made regarding attempts to utilize such tests as have been developed by Hartshorne and May.

III. INSTITUTE GROUP — "HEALTH EDUCATION TO PRODUCE HEALTH"

ARTHUR H STEINHAUS, *Chairman*

1. It is very important that children be not merely taught what to do and what not to do. These so-called "rules for proper living" must be backed up with reasons from the basic sciences such as physiology and bacteriology.

2. More attention needs to be given to the nature and causes of postural deviations from the recommended normals, which are due to specializations in sport or occupation and to individual and racial differences in constitutional type. A single postural standard is probably not adequate.

3. There are now available methods for determining body weight and proportions based on skeletal proportions of the individual which are preferable to the standard height-age-weight tables (see Willoughby in *Research Quarterly* for March, 1932). The employment of such standards is a step toward recognition of the individual personality.

4. Health educators must recognize the importance of measuring the results of their health education program to determine their effectiveness. This requires the development of methods for objectively determining the amount of change in ideas, attitudes, and habits ascribable to the program in question.

5. The need of eugenics education of young people deserves greater recognition. By virtue of his interest and training and the unique position of confidence often enjoyed by the physical educator it appears that he is a logical person to take leadership in such a program.

6. It is an important responsibility of physical educators, particularly those who deal with that large fraction of the population not in school, to help adults to "see straight" on matters of health. This need is accentuated by the large amount of unethical, commercial propaganda which parades under the guise of health education over the radio and in the newspapers and magazines of the day.

IV. INSTITUTE GROUP—"NEW SLANTS IN SUPERVISION"

HEDLEY S. DIMOCK, *Chairman*

I. SOME BASIC CONSIDERATIONS

1. Supervision is a *crucial aspect of physical education for personality outcomes* because:

a) It represents the way in which the available resources of psychology, education, mental hygiene, etc., are brought to bear upon the educational process.

b) Our instructors, teachers, and leaders are frequently more "activity-minded" than "person-minded" and this *plus* of insight and knowledge necessary to be effective in the development of personality requires a well planned supervisory program for their further education in this latter direction.

c) Significant new resources are constantly being developed and the supervisor must find ways of relating these new resources to the educational program so that the student or participant may have more adequate experiences and more wholesome growth.

2. The method of supervision is *cooperative*. Supervisor and teacher face together common problems with the single purpose of providing richer experience for the "learner."

3. The basic element in supervision is the *supervisor*. He really determines whether the teacher or leader is encouraged or discouraged, inflated or deflated, stimulated to grow or cramped into static patterns of thinking and practice.

II. EIGHT PRACTICES OF SUPERVISION

1. The content in *meetings* of teachers or leaders will be *related more directly* to the personality aspects of physical education.

2. The *interview or conference* of supervisor with teacher or leader should (1) be as *frequent* as needed; (2) direct attention more upon the individuals participating in the program, their needs, differences, and responses.

3. The *qualifications formulated for selection of teachers or leaders* must include those elements bearing upon interest in, and competence for, securing personality outcomes in participants.

4. An *evaluation of teachers and leaders* on the basis of their abilities to secure personality or character outcomes through physical activities should be made regularly.

5. Supervisors must appreciate the importance of *morale* of teachers or leaders and understand the factors which condition it. Teachers must have the satisfaction of growth, of encouragement, of sharing in a co-operative enterprise, etc.

6. *Reports from teachers and leaders and records maintained* should include the elements related to the needs, differences, and growth of persons.

7. The *program of physical education* must be continually *evaluated and improved* from the standpoint of the experiences it provides for developing desirable attitudes, abilities, and conduct in persons.

8. *Committees* must be helped to face even administrative matters in terms of the results in persons achieved through the physical educational program.

V. INSTITUTE GROUP—"PRACTICES IN SOCIAL RECREATION"

HARRY D. EDGREN, *Chairman*

1. The social physical aspects of social recreation have made this field a physical director's task and opportunity.

2. The informality of social recreation has meant in many cases a lack of planning and preparing for organization and definiteness so much emphasized in teaching and formal work.

3. The range of activities of social recreation lend themselves to both a wider range of participation and assignment of responsibility to individuals. (This is important from the standpoint of personality development.)

4. Social recreation should not be content with just a new experience away from routine. It should be concerned to make use of these informal occasions to a maximum both in program and in the development of the personality of those in the group. This requires careful and intimate knowledge of folks in our group, careful planning of every detail in order that the largest number of values might accrue from the occasion.

5. The group emphasized the fact that as leaders in this field physical directors should determine the objectives of the group for every occasion and that materials and methods be developed in line with these determined objectives.

6. Concern was expressed that social recreation activities be conducted in the best hygienic surroundings and the laws of personal hygiene be a constant concern of the leader;—

7. That leaders be alert to the possibilities of the beautiful and aesthetic in our social recreation program;—

8. That leaders be alert to the possibilities of the many social physical games in activity now used throughout the country. The new fields in this endeavor are the home-made game equipment, mixer dances for social occasions, the folk and square dances, and the possibility of aiding folks in their home party planning;—also,

9. That we determine as leaders to be alert as never before to the needs of individuals and the possibilities of social recreation in meeting those needs.

A New Deal In Physical Education

By C. H. McCLOY, Ph.D.

State University of Iowa

YOUR committee has asked me to speak on the subject of a new deal in physical education. It seems to me that the essential spirit of the new deal, considered in its best aspects, is that of the spirit of youth always being renewed within us. It is the perfect balance of the vigor and the ever forward looking point of view of youth together with the maturity and experience of the older man. The new deal attempts, not to hold fast to the old just because it is old, nor to discard the old because it is not new, but to look forward into the future and to judge such methods and points of view, such ways of living and philosophies of life, as are compatible, not only with the changes that are already upon us, but with those impending social changes which it is quite evident will be upon us in the near future. This is indeed the spirit of the newer education.

It has seemed to me, as I have looked back from time to time upon such movements in physical education as have happened within my memory, that physical education has advanced in waves. You will remember that where there is a crest to a wave that there is likewise a trough, and that which is on the crest today is in the trough tomorrow.

Thirty years ago physical education exercised boys and girls, developed their bodies into symmetrical, well-proportioned, and strong instruments, bodies of which the individual could rightly be proud, and which were strong enough and enduring enough to press through the day into the evening without undue fatigue. And youth found these programs good. This was followed by a wave of "organic vigor" in which light exercises, light recreation, but considerable activity replaced the more strenuous methods that had occupied the crest just before this. Muscular development became somewhat unfashionable; health took its place.

This in turn slid down the back of the wave and was replaced by a movement for recreation. The game was the thing. In my opinion, this marked the beginning of a relatively sterile period in many aspects of physical education. It was the beginning of the "ball and whistle" era, during which time it seemed that the teacher needed not to be particularly well trained but only to be able to organize and referee games. Jobs were more easily filled with incompetents. But up to and even through most of this period, the better schools still fought for much of the best of the old.

This period was followed by the wave of folk dancing and other rhythmic activities, particularly as applied to girls. This movement, sponsored by Dr. Gulick, accomplished one major thing of importance. Up to this time the conventions of the American Physical Education Association and much of the literature were occupied with wordy fights between the Germans and the Swedes, each group contending that its system, evolved to meet the needs of a specific and rather peculiar situation in a country in Europe, was the only thing for the United States—whose situation was entirely different. Both combined to bury the hatchet—preferably in the heads of the advocates of the folk dance!

This wave was followed by one which is still with us, apparently in the form of a spring tide, which is known as the "educational movement in physical education." Born largely of Thorndikian psychology and the educational philosophy of Dewey, it has moved forward, leaving behind in its whirlpools and eddies many of the good things of the past. We are told all too frequently that there is little to be expected from an automatic transfer of training. This survey of the waves of the past, it seems to me, would indicate that at least we have transferred one thing from the automobile industry; when we give birth to a new child, professionally speaking, we seem to have contracted the habit of turning in the first born on the baby.

The physical education of the Young Men's Christian Association was in the beginning evolved by trial and error from many compromises. In the usual day's order some of the calisthenics or free standing exercises of the Swedes, often combined with some of the free-hand or dumb-bell exercises of the Germans, preceded some Roberts-modified German apparatus work, which was in turn followed by a central-European-born dancing. This in turn was capped off with games and athletic activities and sports boasting a British ancestry. The leaders in the Y.M.C.A., usually not having a national system to defend, and having the added advantage that members who did not approve of an activities program would not attend, experimented and changed, introduced new features, and eventually evolved a system which just prior to the advent of the "educational emphasis" had come to be called the American system. It held fast to a large number of the strong points of past systems and much of it was taught in what has been called the "formal" manner.

WITH the advent of the "natural method"—claimed as a part of this educational emphasis—much of this American physical education was questioned. The new psychology rejected anything called "formal"; and it seems to me that many of us were stampeded by this term. Technical terms carelessly used are not infrequently, especially in education, the sort of words a friend of mine calls "omnibus words" because they carry so many unknown passengers. When these words are attached to something, particularly if it is old, it not infrequently

carries with it an odium and causes the unthinking to reject it just because of its label. The best of the new deal in physical education will, I am convinced, re-evaluate the content of the old, unperturbed by labels.

It must be remembered that many good things have been taught by bad methods, and all too frequently good content material has been carelessly condemned because of its faulty presentation. Let me illustrate.

Apparatus work is at least one hundred years old. It was practiced by boys and men of all ages and had much carry-over value, as can be verified at any time by visiting a Turnverein or a Sokol in this country. Here you will see grandfathers disporting themselves on the apparatus and enjoying it with their sons and grandsons. This apparatus work was well taught and its content was largely composed of stunts, more or less difficult to perform, which challenged the ingenuity and the powers of the participants. Then some one wrote a book. He listed hundreds of apparatus exercises, unfortunately more exercises than stunts, so that all that the prospective teacher had to do—or so it seemed—was to follow the list in the book. On the parallel bars it began with mount to the cross rest and get off again. The next time one mounted, he raised one knee. The next time he raised the other knee. Then in turn he raised one thigh and then the other, and then both, *ad nauseam*. It was not interesting. It was not challenging. And it encouraged a generation of teachers who could produce nothing better. A committee from the Physical Directors' Society of the Y.M.C.A.'s of North America revised it—and if anything, made it worse. Usually it was compounded in the proportion of one stunt to about half a dozen exercises. Then the nomenclature developed, and these classes in apparatus work became, not a group of individuals interested in developing and displaying their prowess at stunts, but a class in nomenclature. How many of us older men have seen the leader face his squad, pick up his card, and read, after indicating the first man with his eye-brows: "Mount to cross rest at near end; left leg half circle over right bar; right leg half left circle over both bars with half left turn to cross riding seat over both bars facing near end; hand behind; front vault dismount right." "Now," said he to the first man, "Do that!" Why in Heaven's name should he? This member came for fun, for exercise, for recreation. He asked for recreation and we fed him nomenclature. Eventually the teacher degenerated to the point where even he didn't know the nomenclature, and apparatus work has largely died, a victim of its best friends. The newer education read it out of the program as "formal."

Turn back through history to the apparatus exercises of Father Jahn at the Hasenheide, first performed on trees and poles as natural exercise. When the early apparatus was invented the movements were free and natural. It was only later under the leadership of Spiess that these

were formalized as to performance and form. In the Turnverein today, aside from those times when they are preparing for exhibitions, the work is free and informal, a group of individuals practicing first one thing and then another, imitating each other, inventing new combinations, and doing natural movements—as natural as baseball, basketball, or golf. Calling this *activity* formal was damning a good dog by giving it a bad name. Its *presentation* might be formal, but much of its *content* was sound. Will not the new deal in physical education more intelligently examine the content and separate this good from the bad, retaining that which is useful?

Calisthenics has had thumbs turned down upon it as a child of the formal system. In my opinion, probably most of the calisthenics deserves this. But let us remember when we advocate the natural system in physical education that our environment today is far from natural. Suppose you turn to that fascinating volume by Dr. Charles Eastman, *My Indian Boyhood*, and in it read of a really natural program of physical education. That kind of system has the slight disadvantage, however, of requiring between six and eight hours a day to practice it if one would graduate at adolescence with honors. In most school systems where, if one is fortunate, he has three thirty-five-minute periods a week, and at most Y.M.C.A.'s where he may have three sixty-minute periods a week, time must be used to better advantage. One can not play along carelessly wasting hours of time teaching something in six weeks that with better methods of instruction might be learned in two. Experiments with varying methods of instruction have shown that activities in which one group reached its peak in six weeks when taught to another group by a whole-part-whole method enabled them to reach their peak in three weeks, or one-half the time. Many of the "part" phases of such a method of instruction involve what has been called mimetic calisthenics. Perhaps we might take the curse off it by calling it "mass coaching." Granted that much of the calisthenics should become merely historical material, I feel that the new deal in physical education will re-evaluate the old content and retain and remodel and use to better advantage those parts of it which are really useful.

Hence, the first part of my discussion of the new deal would emphasize a careful, scientific, and philosophical taking stock of the best of the past and a reorganization of those elements of it which prove their worth in the task of accomplishing our objectives.

WHAT of the new? Lest I have given a wrong impression in my advocacy of the old, let me state that I firmly believe that most of our practices, whether in the Y.M.C.A. or in the schools, at present lag about fifteen years behind our best thinking. Physical education, of course, is not unique in this. I think that the new in physical education will think of the program, not as an agglutination of activities

thrown together into a day's order, but as a laboratory in which one practices many important aspects of living.

Most of us would agree, I imagine, that laboratory education is good. We have thought of laboratory education, however, largely as chemistry, physics, and biology. Laboratory education is simply learning by doing. When you learned handwriting by striving over and over again to produce perfect copies of the model, that was laboratory work in writing. When in your arithmetic you solved hundreds of problems, that was laboratory work. When you tried to converse in French, to write themes, to debate questions in hygiene, that was again laboratory work.

In past generations in our pioneer country every aspect of life was pregnant with laboratory situations in which one might develop those traits and characteristics through which he became an active, independent, adaptable, and resourceful citizen. As our pioneer background was progressively replaced by a systematic, organized, but mechanized, urban civilization, too much was done for the individual, and these laboratory opportunities rapidly disappeared. The physical educator and the boy scout leader are trying to supply this training without reverting to primitive situations.

In this laboratory in our new deal we are going to utilize everything that is best in the newer education while holding fast to the best in the old. Much of this newer education is based upon educational psychology and its child, the modern educational philosophy. May I rapidly mention a few of the points of emphasis? As I mention these the discerning among you may smile as you recognize good practices of this "newer" education which were probably current in the days of Pericles and which have certainly been current in most good coaching.

1. There is an increasing emphasis upon the individual rather than the group. The coach has always applied this; he had to to win games. He did not just broadcast football to a class, he taught and emphasized the things in which each individual was deficient. Education has recently rediscovered this. In physical education we have done rather well in our advanced courses; most of our varsity coaching is reasonably good; and we are doing better every year with our average group. But so far physical education has woefully neglected the physical deficient. Where the mental educator has established schools for retarded children, or in smaller schools has organized "opportunity rooms," the physical educator has in general closed his eyes to these motor morons and prayed that he wouldn't draw too many of them. In the Y.M.C.A. he had reasonably good luck, for his teaching had so little to offer these individuals that they lost interest and did not come back. This group needs much more attention, not in their exercising, but in helping them to adapt educationally to a modern environment.

2. More thought is being given to objectives and to attaining them.

Physical educators are organizing their programs more and more, not around activities as ends, but around activities as a means to attain *objectives*. They are planning their teaching so that character learnings may be assured and are studying more carefully the problem of the transfer of training.

3. I think I see a return to a greater emphasis upon skills—which emphasis was lost at the beginning of the group recreation period. It is high time. In the public schools the elementary school pupil has been permitted to suffer from six to eight years under the ministrations of a classroom teacher who knew nothing of physical education, who knew not how to teach the skills, and who more often than not taught activities in such a way as to produce habits of action and motor skills neurologically worse in their way than adding on the fingers would be in arithmetic. He is led to learn something the wrong way and then to add something else wrong on top of that to act as a partial "corrective." This is like driving in golf with an overclosed stance in order to correct for a slice caused by hitting inward across the ball—this rather than learning how to hit directly through the ball with the club face at right angles to the proposed line of flight. I wish to suggest the possibility that this type of teaching is a neurological crime, that it creates what might be called "brain detours," establishing neurone habits that go from here to there—by way of the Orient. I should like to suggest the probability that this type of educational process produces slower response times to critical situations and results in annoyances and wastes of nervous energy not at all in harmony with the demands of today. I feel, therefore, that it is high time that we turn to better ways of learning. We see on the horizon attempts to discover the "fundamentals" of physical skills. In several places we find individuals analyzing skills into their mechanical elements, experimenting with the teaching process, endeavouring to find the best presentation and the best method of combining elements in order to meet the present demands and most quickly bring insight and mastery.

4. As a corollary of this last we find much interest in the *organization* of teaching material so that it may be better taught and better learned. This involves more preparation upon the part of the teacher as well as constructive thought and planning.

5. In many places we are finding a serious emphasis given to physical education classes as *instruction*, not just as exercise or play or recreation. There is an attempt to teach so adequately that the class member will learn well enough to thoroughly enjoy what he does.

6. There is a greater and more intelligent use of the laws and principles of learning, and their application to our own field.

With all of this comes the need for a measurement program, and I should like to suggest at this point that one of the next steps for the Y.M.C.A. is to study the problem of a battery of tests and measurements that

will fit its peculiar needs. One cannot be testing and measuring all the time, and yet if one does not measure, one does not know accurately the needs of the ultimate consumer.

ANOTHER aspect of the newer emphasis in physical education goes back to something that we have been told by the psychologists, to which we have agreed, and then forgotten. We have been told that in modern psychology there is no separation between the mind and the body, but that we are dealing with a personality or a united organism, what might be called psycho-motor unity. The psychologist has told us this and promptly forgotten it and gone on interpreting his psychology as though he did not believe it, talking largely of the mind, except of course, when he was playing with rats, chickens, apes, babies, and such, when he had to approach the mind through the body. And the reason he disregarded this teaching was that he didn't really believe it himself. It took me ten years to come to believe it and I am going to try to convince you of this unity in the next three minutes.

Suppose I select from among you some vigorously responding individual, and suppose I slip up behind him and jab him with a pin. No sane person among you would suggest that he responds only with his mind. Reflex action jerks him abruptly away from the pin. He recognizes the situation, certain aspects of his response, that we might think of as intellectual, direct motor responses which we speak of as vocal—movements of the lips, the tongue, the larynx, associated with vigorous expiratory movements of the breathing apparatus. Varying with the situation and his past cultural background he makes other motor responses, more or less adaptive. His blood pressure rises and, as you will remember from William James' chapter on the emotions, a great many changes take place throughout all of the smooth muscles connected with the viscera and throughout his endocrine system. In other words, this gentleman responds with every fibre of his whole personality.

Let us proceed several steps toward the beginning of the evolutionary series and prod an earthworm with the pin. He responds very much as does the man, keeping in mind the fact that his whole mechanism is simpler. The little nubbin of gray matter that passes for his brain endeavours to integrate the whole wriggle so that it gets him away from the pin. He retreats and in so doing modifies all of the functions within his body.

Let us go clear back to the zoological beginning and place an amoeba in some water under the microscope. Let us stick him with a little chemical pin of some irritating substance put into the water at one side. As this diffuses over and reaches his body and irritates him, in his simple way he makes the same adjustments and the same sort of movements that would be made under analogous circumstances by the man who watches him through the microscope. He moves away. He hardens himself into as com-

pact a ball as possible and puts up all his defenses against this irritating substance. No one can accuse him of having a mind, but he acts with his whole being, and so do you. As you listen to this talk, you are not listening with your mind alone. You are responding with internal secretions, with muscular movements, and many of you are making subvocal movements with your larynx. Some of you are playing with buttons or doing other things which are not purely mental.

When you teach physical education you are not teaching just bodies, you are educators approaching a whole individual, but largely with one group of activities. Just as the teacher of chemistry performs best in a laboratory or a lecture-room, the teacher of home economics in the sewing-room or the kitchen, so the physical educator educates in the gymnasium and swimming pool, on the athletic field, the tennis court, or the golf links.

You will remember from your physiology that there is what is called the anatomic or the sympathetic nervous system. This is roughly divided into two parts, one that is usually called the cranio-sacral para-sympathetic nervous system, and one that is called the spinal nervous system. These two systems both supply every important internal organ and exhibit opposing functions. The para-sympathetic stimulates in ways that are associated with the pleasant things of life. After one has eaten well, has enjoyed music, or made love, this system quiets the heart, stimulates the secretions, starts up peristaltic motion of the intestines, and in general makes one feel as one imagines a cat feels when he lies on the rug before the fire and purrs.

The spinal sympathetic nervous system, on the other hand, does just the opposite and stimulates one in much the same way as when he is frightened. The hair stiffens up, the pupils dilate, the secretions are withheld, peristaltic motion stops, the heart is accelerated, the blood pressure rises, and adrenalin is poured out into the system. These responses are the accompaniment of various emotional states and are called forth by all sorts of things in all sorts of educational circumstances. The maladjusted boy who is afraid to mix in basketball, afraid to box or wrestle, does not have his trouble all in his mind. Much more of it is in his abdomen. He may develop an acute ill health if such an emotional state becomes chronically conditioned, producing various fears and dreads of further participations, worry over social disapproval, and feelings of inferiority. In the words of Professor Raup, "His complacency is disturbed," and in the terminology of the Gestalt psychology, his return to normal by "least action" is blocked. This individual presents a psychomotor personality problem which is far more complicated than a game of basketball. The new deal in physical education will attempt to understand and to deal intelligently with this individual as a unit.

In our civilization the internal secretions are as often our enemies as our friends. In the Stone Age many of these secretions enabled our an-

cestors to adapt to natural situations in much the same way that the automatic carburetor adjustments enable the modern car to respond adaptively to varying demands of the road. Adrenalin was poured into the system as something that increased his acceleration and gave him more power. Adrenalin was the high-test ethyl of the Stone Age. Today these secretions are frequently poured into the system because man ten thousand years ago had to react vigorously with his whole body. Today it simply floods the carburetor. Many an individual who testifies gratefully to the way in which the Business Men's Class clears his mind, aids his digestion, and makes him feel free and relaxed, feels as he does because he has burned up these accumulated internal secretions of the day. Without this exercise his motor races and shakes his soul to pieces. This is part of the psycho-motor adjustment of the whole organism.

WHAT has recently been called *mental hygiene* is making us more aware of many of these problems. In a study of the freshmen in one educational institution it was found that those who rated themselves as poorly built, under-developed, and unskilled apparently compensated as much as they could by attention to dress, tonsorial grooming, neck ties, and much pressing of clothes. The well developed and skilled individuals, on the other hand, had some scorn for these aids of fashion and were apparently satisfied with the knowledge that their bodies themselves created an impression that needed few artificial aids. Almost all of the students in this study fervently expressed themselves as being *desirous* of being well built, well developed, and well muscled. This calls attention to the importance, from the standpoint of mental hygiene, of avoiding the inferiority feelings that go with scrawniness and lack of essential skills, and points the way to another service by those of our profession.

Man needs an adequate expression for the release of his emotions. It is not everyone who can make love as Browning did with poetry. Few can express wild dreams with the violin as can Kreisler. Few of your members can express themselves with the brush, painting what seems real in an unreal world that all may see. And yet the soul craves such expression in varying amounts, fortunately for those of us who are less talented. It is well for the physical educator to remember that one of the most fundamental urges, so far as expression is concerned, goes back to that adequate physical expression such as found an outlet in our savage ancestors in performance well done. When we hit a golf ball and it goes and goes, straight down the middle of the fairway, and we have not pressed or tied up, there is a deep spiritual satisfaction that pervades the entire being. Most of us would prefer to meet a baseball squarely and have it almost lift the second baseman off his feet—and be out—than to stub a ball clumsily down the first base line and reach first base safely because the pitcher fell over his feet in attempting to field the ball. The first brought the satisfaction of accomplishment, while the second brought the annoy-

ance of failure. I should like to emphasize the need of teaching skills so adequately and calling attention to this expressional aspect of the skills in such a manner that the individual plays, not just with his muscles, but with his mind, his emotions, and every aspect of his being—and finds it good.

Those who fail at some things will attempt an adjustment. The individual who cannot win must be led to an adequate substitute. This may be in the learning of individual sports such as swimming, where, while he may not be able to win a race, he can learn to swim a mile. It may lead to badge tests or other standards in which he competes against standards rather than people and may be pleased with his improvement. In some cases he will enjoy an adequate vicarious substitute when "*our team*" wins.

The ancient Athenians in the days of Pericles understood this when they divided their education into music and gymnastics. This "music" included ceremonial dancing, dramatics, art, and all of the expressional activities. The individual expressed himself, not simply with one kind of skill, but as a unified personality.

ANOTHER great problem of the new deal is that of leisure time. This is a study in itself and I can pause but briefly. I should like to point out, however, that if we reach the time when we have eight hours a day of leisure, that the answer is not going to be soft ball! Nixon and Cozens have suggested that leisure-time activities will divide themselves into four types, the intellectual, the social, the artistic, and the physical. In the past, those of our profession who have interested themselves in leisure-time activities have specialized on this last. I believe the new deal in recreation means emphasizing all four, and the Y.M.C.A. teacher who neglects to learn the fundamentals of all of these and to encourage their development and who fails to offer opportunities for their exercise will be failing as an educator.

It is probably far more important that an individual be taught how to *appreciate* music and how to look at paintings than it is that he be taught how to play an instrument or to draw. Few will be good as performers, but the many can be good as appreciators. In answer to those individuals who may deprecate or deride the importance of teaching one how to enjoy a picture, I should like to point an analogy.

If a noted football coach, one of you, and, let us say, your wife, should all three attend a football game, they would not see the same game. In all probability the wife would see twenty-two people scramble themselves and unscramble. If, in these days of deception, she is lucky enough to spot the man with the ball, she either sees him scamper across the line and score or sees some one rudely interrupt his progress. You, assumed to know more of the game, will note the schemes of offense and defense. You will participate in anticipating the strategy and will use some body-

English to help the interference. The coach will really see the game. He will note the line play, how each team sets against the forward pass, little tricks of deception, ways in which players give away a coming play, and in short, will be the one who really enjoys the spectacle. Why? Because he knows how to look at the game. In such a way an artist, who has learned how to look at a picture, is the one who really enjoys it. Cannot laymen who will never learn to perform as participants be taught how to look, to listen, to interpret, and to appreciate in the arts, in the sports, and in other cultural fields which are or will in the future be related to leisure-time enjoyments?

To accomplish much of what we have discussed above, the Association employed officer will have to give more time to study. Someone in your profession must do the research that produces for you new methods to meet the problems of the new deal. Some of these will be scientific, some will be problems of philosophy, others will be technological attacks upon method, and some will be just plain hard work and keeping up with the literature.

One of the problems which is confronting the Y.M.C.A. and similar social organizations is that of whether a specialist or a generalist is needed for this sort of work. I think that what is needed is a specializing generalist. Just as the specializing physicians must have the common background of anatomy, physiology, pathology, medicine, surgery, and other things, so must the teacher have the common background of the institutional methodology and of the best educational practice. But, as this physician specializes further to be of greatest service, so, it seems to me, must one be really a specialist in physical education, for the generalist will never produce the answer to these increased and specialized demands of the new day.

FINALLY it would seem to me that we all need to emphasize more of what might be called the missionary spirit in our profession. By this I mean, not the religious emphasis particularly, but that spirit of enthusiasm, of belief in our work, of living our message, which characterized our professional predecessors in the old days when men enthused over exercise and hygiene. Far too frequently when one specializes and seeks facts in a forest of scientific detail, one loses the *spirit*, and without that one ceases to be an educator.

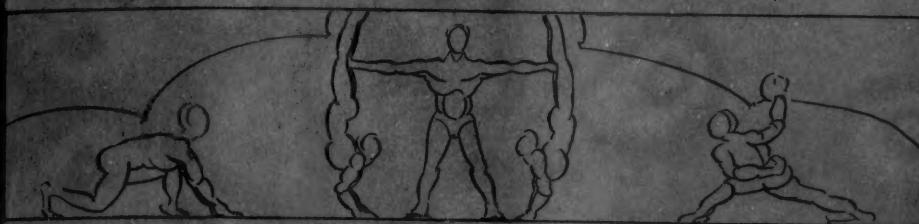
This brings me fittingly to speak of the man whom we have gathered to honor. I have known Mr. Foss for more than twenty years. I have known him in the old days when the gymnasium almost limited one's professional vision, and it is significant to me, in the light of my topic today, that the last communication I had from Mr. Foss was the most forward looking and constructive suggestion that I have received this year. It was that spirit of which I spoke in the beginning of this address of the man of the maturity and experience of the old with the vigor and ever renewed

point of view of youth, boldly pressing forward into the problems of the new day. Mr. Foss has ever been like that; tenaciously holding fast to that which was good from out of the past, adapting it, revising it, presenting it in new forms, and pressing forward to that which his vision led him to believe would answer the problems that were arising, not only in this generation, but that would arise in the generation that is soon to be upon us. I am happy that this last address of this program honoring this great educator and leader in Association physical education has been on a subject, not looking back and reminiscing into the past, but thinking, as I know he thinks, of the present and of the future, facing the problems of a new deal in physical education.

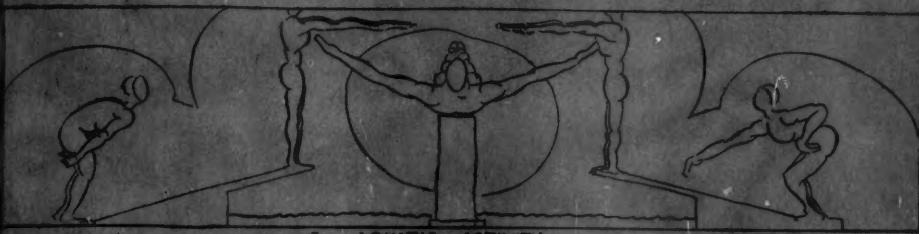


PATHWAYS TO PERSONALITY—A PAGEANT

(Illustrations continued from inside front cover)



4. STUNT ACTIVITY



5. AQUATIC ACTIVITY



6. COMBATIVE ACTIVITY



7. GAMES AND SPORTS

